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FOR THE PROTECTION OF WILD BIRDS AND MAMMALS

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BULLETIN

OF THE

MASSACHUSETTS AUDUBON SOCIETY

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The Editor solicits the gift of articles, notes, photographs, and sketches, on the various aspects of Nature Lore, Natural Science, and Conservation of Natural Resources. If possible, articles should be typewritten, double-spaced, on one side of the paper. Photographs should be on glossy paper with data attached. The Society is a non-profit educational institution and we offer no remuneration for contributions to the *Bulletin*. The Society assumes no responsibility for the safety of manuscripts or illustrations submitted for its use.

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The President's Page



Henry Moore, the Rod-and-Gun columnist of the Boston Herald, seems to feel as I do that the sportsmen's clubs should not fail to promote legislation which would require an examination before the issuing of a license to carry and shoot firearms, and should discourage the State Department of Natural Resources from spending further money in raising Pheasants which decline to go into the woods but remain on open fields and about buildings. Unless active measures are taken to reduce this waste of money, the Grange and the owners of farms whose children are endangered by careless shooting are likely to be active in town meetings that will be called by indignant householders, and shooting will be prohibited in their communities regardless of any claim that the gunner has received permission from the owner of the land over which he is shooting.

This is a current example of the old fable of the killing of the Goose that Laid the Golden Egg.

By artificial feeding and by rough handling, our geese which have been abused by careless users of firearms will become vocal and will refuse to be further imposed upon. See Dahl's clever cartoon of the householder taking down his stuffed moose head so it should not be shot at through the great picture window of his living room built in the present fashion.

Robert Llewellyn

A Cloud of Witnesses

BY ROSALIE EDGE, *President*

Hawk Mountain Sanctuary Association



KATHLEEN SKELTON

A Typical Autumnal Gathering at Hawk Mountain Sanctuary.

HAWK MOUNTAIN SANCTUARY is twenty years old. Members of the Massachusetts Audubon Society have known it since it was a lusty infant and have followed its fortunes through the years of its development. Many among you have visited the Sanctuary and have joined its Association; you have watched it become more useful and more beautiful under the direction of its always resourceful curator, Dr. Maurice Broun. Now it has a fine building, with a beautiful Common Room ready for social and educational use, not only for our own members and visitors, but for other organizations that would enjoy coming together in beautiful surroundings. Hawk Mountain Sanctuary, always unique, is on the threshold of expanded work for the protection of wild creatures, and wild places, and for the education and enjoyment of the increasing number of people who, through contact with its beauty and high ideals, have come under the spell of its spirit of charity. Let me say, "Welcome to all!"

On the last day of October, 1954, Sunday it was, the Directors of the Association gave a party to celebrate the 20th Anniversary of the founding of the Sanctuary. It was a delightful party, all agreed. The day was clear and crisp, a few hawks flying, but not so many as to detain our guests on the Lookout Rocks when it came time to gather in the Common Room. A mile of cars were drawn up on the side of the road, and some 250 people were seated and standing in the room, while perhaps fifty more listened to the loud-speaker on the terrace.

As president, I had the privilege of introducing the pioneers who had preceded me. First, though regrettably not present, was Colonel Henry W. Shoemaker, who first discovered the hawk-shooting on Hawk Mountain in 1903. He tried vainly to stop the slaughter, but the orders of Governor Brumbaugh and Governor Pinchot, to whom he appealed, were disobeyed, as similar orders are today disobeyed, and the shooting continued. Years later Henry Collins and Richard Pough came upon the carnage almost by chance and publicized it in 1933. It was good to greet these two men personally. It was also heart-warming to have Dr. Robert Cushman Murphy with us in good health. He was president of the National Audubon Society when it generously contributed to the Sanctuary in the first two years of its life. I tried to tell a little of what each of our directors has done to forward our work, but fear that I failed to give any adequate idea of the devotion of each and every one.

Our panel of six speakers* stressed in what way they thought we had been successful, and how we might be more effective in the future. Let us consider the views of two of these most interesting men.

Mr. Robbins, representing the Fish and Wildlife Service of the United States Department of the Interior, held in his hand the late Dr. A. K. Fisher's *Hawks and Owls in Their Relation to Agriculture*, published in 1893, the study that for sixty years has proved incontrovertibly that the hawks and farmers are, or should be, the best of friends. I gathered that Mr. Robbins believes that from long-established proof it is high time to go forward into action that will preserve the predatory birds. Colonel Biddle, representing the Pennsylvania Game Commission, however, argued that, in Pennsylvania, education is still necessary before it's good, if rather too limited, hawk protection laws can be enforced.

Colonel Biddle's remarks made me search my soul. Pennsylvania has been courteous to Hawk Mountain Sanctuary. Hawk Mountain is marked on its maps, official road signs indicate its direction. The letters of the Game Commission are always polite and contain many promises. The laws of the Commonwealth supposedly protect all hawks except the accipiters — but within a few miles of the Sanctuary, and on government-owned land, they are wantonly and most cruelly shot, and with full knowledge of the game wardens. And not only are the laws of Pennsylvania broken, but Federal laws are broken, too, when birds protected by treaty are also destroyed.

If, after twenty years of education, Pennsylvania is not far enough advanced to make it possible to enforce the laws, what then has the Hawk Mountain Sanctuary Association, incorporated for the education of the public, accomplished in the Commonwealth from which comes the greater number of its thousands of yearly visitors? Has the Association, I asked myself, done anything, except to stop the shooting that once took place on its own high rocks?

With all humility, I answer that the Association has accomplished wonders. It has awakened the people of the Commonwealth to the iniquity that goes on within its borders, it has stirred their consciences, it has aroused their determination. And Pennsylvanians are grand conservationists, none better. The end is not yet.

* Dr. William Vogt, author *The Road to Survival*; Miss Sidney Kutz, Girl Scouts of the U.S.A.; Chandler S. Robbins, Fish and Wildlife Service; Paul Nowland; M. Albert Linton, President, Philadelphia Academy of Sciences; Colonel Nicholas Biddle, Vice-President, Pennsylvania Game Commission.

Let us remember, also, that a prophet is not without honor, *save* in his own country. The teaching of the Hawk Mountain Sanctuary Association has spread, not only into every State of our Union, but it has crossed the seas. It has inspired many beyond our border. It is recognized as a great factor in a widespread awakening in far lands to the need to protect hawks and other predators. Of this the directors have, not only the testimony of good consciences, but also signed and documented proof — as you will see:

Let us go back to that happy afternoon when we met to rejoice in our twentieth birthday. Our secretary, Mr. Peter Edge read the names of heads of organizations and private individuals who had sent us congratulations, but there was not time to read their delightfully kind words. Let us quote some of these messages, assuring us that Hawk Mountain has been and is worth all the effort that has been so devotedly put into its work:

American Ornithologists' Union

Alden H. Miller, President

"Not only has the Sanctuary been created and many hawks conserved thereby but an example has been set for other conservation interests in what can be done in educating the public and capturing its interest."

Fauna Preservation Society

The Marquess of Willington, President

"The desirability of preserving birds of prey is an aspect of wild life protection which has only recently begun to have the consideration which it has always deserved. To this awakening your work at Hawk Mountain Sanctuary has already greatly contributed."

U.S. Fish and Wildlife Service

Ernest Swift, Acting Director

"The 20th anniversary of the Hawk Mountain Sanctuary well deserves the congratulations of conservationists everywhere. We wonder if you know of the splendid tribute paid to Hawk Mountain Sanctuary several years ago. Dr. Warren J. Houck made a survey of wildlife refuges and the educational opportunities they offer. He presented an evaluation of national, State, and private wildlife refuges. Following his survey, which extended into all parts of the country, Dr. Houck placed Hawk Mountain Sanctuary at the top of the list."

International Union for the Protection of Nature

Jean-Paul Harroy, Sec. Gen.

"We are very much aware of the remarkable work accomplished at Hawk Mountain Sanctuary by conservationists both in the scientific and educational field. The part played by yourself and your Committee in this accomplishment has been outstanding and has deserved the recognition of all nature protectors."

Massachusetts Audubon Society

C. Russell Mason, Executive Director

"Not only does the Hawk Mountain Sanctuary attract increasing numbers of visitors each season, who undoubtedly go away with a better conception of predator protection, but also I feel that the work done there has been a good example for the rest of the country. It is largely through your efforts and work at Hawk Mountain that many States are coming to realize that all hawks and owls should be protected."

National Audubon Society

Ludlow Griscom, Chairman of the Board

"Not only has the protection afforded our rapidly decreasing hawks by Hawk Mountain Sanctuary been of definite use and value in conservation, but the stimulus and love of outdoors and nature study to the crowds of visitors have been, it seems to me, an even more important social contribution."

National Parks Association

Sigurd F. Olson, President

"Hawk Mountain Sanctuary is an example to the entire country of the importance of preserving our much misunderstood and maligned raptorial . . . It has pointed the way for other areas. From the standpoint of ornithology and a unique type of refuge, it may well class with the setting aside of our first wilderness areas, or our national parks, in setting a pattern of the future."

New York Zoological Society

Fairfield Osborn, President

"The celebration of the 20th Anniversary of the Hawk Mountain Sanctuary is one in which our country can rejoice. It represents what just a few people can accomplish, if motivated by an ideal. The Sanctuary is not only a boon to eagles and hawks, but an inspiration to everyone working for wildlife protection in particular and conservation in general."

Royal Society for the Protection of Birds The Rt. Hon. Lord Forester, President

"Hawk Mountain Sanctuary has almost come to be regarded as one of the seven wonders of the world. It has, we all know been of immense value in furthering practical protection in North America, but the boldness and the success of the venture have undoubtedly had repercussions far outside that Continent and have, in fact, been an inspiration to us all."

The Wilderness Society**Olaus J. Murie, President**

"Hawk Mountain Sanctuary has had wider and more positive influence on national thinking in its field than any other single refuge. It is this thinking that we need. I know this work we all believe in so thoroughly will grow and grow in strength and be a blessing in the future."

Julian S. Huxley

"Hawk Mountain Sanctuary is clearly one of the most interesting and important organizations of nature in America, and I wish it all possible success."

and

THE PRESIDENT OF THE UNITED STATES

"I am delighted to learn of the twentieth anniversary of the Hawk Mountain Sanctuary, and my warm congratulations go to you and to your associates as you celebrate this significant milestone in the bright history of your Association.

"Your devoted work and that of your associates at Hawk Mountain demonstrates how much can be accomplished in the field of wild life conservation by the voluntary work of individuals and interested groups. All of you have my best wishes for the continued success of your important work. I hope that others, learning of your deeds, will be stimulated to similar efforts in their regions of our great nation."

"Sincerely,

"Dwight D. Eisenhower."

These wonderful messages have renewed our strength. We now pass them on to you — not boastfully, but that you, too, may renew your courage. We beg that you will make them yours in the assurance that conservationists here and abroad stand with you in your battle for hawk protection.

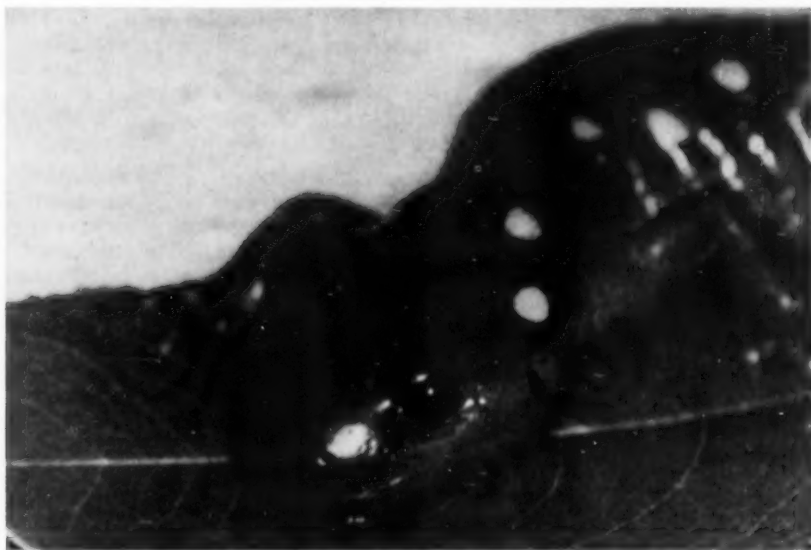
Connecticut is first in line among our eastern seaboard States with a model hawk protection law. (We hope that her fine conservationists drew some inspiration from their intimacy with Hawk Mountain.) With protection in Massachusetts, complete protection in New England must follow; New York will extend her hawk protection; and New Jersey's hawk slaughter at Cape May must then be terminated.

And lest I appear unfriendly in what I have said about Pennsylvania, which I love so much, and where I am so much at home, I hasten to add, in extenuation of her failure to enforce the hawk laws, that she and certain other States suffer under laws that are not easily enforceable — for laws that supposedly protect some hawks while omitting others are often useless. It is necessary for enforcement that all hawks be protected (and all deserve protection), for the type of man who enjoys this slaughter — which he alone calls "sport" — does not know one species from another and shoots all indiscriminately.

I rather think that complete hawk protection may become a race between Massachusetts and Pennsylvania. Meanwhile, we at Hawk Mountain, surrounded as we are by a cloud of witnesses, onward urge our way.

The Salamanders of Massachusetts

By DAVID SARGENT



G. BLAKE JOHNSON

This Spotted Salamander posed nicely at the Museum of Science. Our largest species, the Spotted Salamander makes an interesting terrarium tenant.

Many of us, while on bird walks, find some plants or animals which we cannot identify. This article is written with the hope that it will be of value to those who wish to recognize our native salamanders and aid those who would like to keep these creatures temporarily in captivity.

What is a salamander? A salamander is an amphibian (not a reptile) and is therefore closely related to the frogs and toads. It cannot withstand sunlight or excessive heat. Salamanders are best located by overturning logs and stones in damp woods and along the banks of brooks and rivers. They are active at night or on rainy days, and collecting trips often prove successful at these times.

The Massachusetts types are divided into two groups, the lungless and those with lungs. The lungless forms, especially, need a damp atmosphere, and this should be kept in mind for captive specimens.

There are nine species of salamanders native to Massachusetts. The following paragraphs describe each of them. Most of the information given is taken from notes I have made of the habits of my "pets" and from observations on field trips.

The Lungless Salamanders

FOUR-TOED SALAMANDER, *Hemidactylium scutatum*. A very small, delicate salamander which has a reddish-brown back, a white belly with small black spots, a constriction at the end of the tail, and four toes on each of the hind feet. It is very rarely found in most of Massachusetts. I found one in Topsfield in March, 1953, and two more in Essex County in April, 1954, all under birch logs near a sphagnum bog. One ate a house fly that was killed and set in front of it. This salamander lays its eggs in the early spring at about the time the spring peeper starts his chorus. Sphagnum bogs are the favorite habitat of this species, but it is very secretive. Maximum length is 3 inches.

DUSKY SALAMANDER, *Desmognathus fuscus fuscus*. Black-, gray-, or brown-backed is this very common species. The sides are lighter and the belly is usually whitish. Maximum length is a little over 5 inches. I have found this salamander in almost every type of locality, but most commonly under rocks in wet swamps and near springs and streams. While in captivity they can usually be induced to eat small insects and their larvae, or worms. This is the only salamander in Massachusetts whose lower jaw is immovable, and therefore it must lift its head to open its mouth.

TWO-LINED SALAMANDER, *Eurycea bislineata bislineata*. This salamander resembles the Dusky Salamander, but it usually has a yellowish belly and has two fine black lines running from the eyes to the tail. This is the salamander that dashes into the water when stones near the water's edge are overturned. Occasionally it is found under logs in very wet places. Captive specimens will sometimes eat small insects, millipedes, or worms. Maximum length is 5 inches.

RED-BACKED SALAMANDER, *Plethodon cinereus cinereus*. This is, without doubt, the most variable of the salamanders. Its typical form is blue black or brown on the sides with a red-brown dorsal stripe and a black and white "sprinkled" belly. One specimen I found at Barre was salmon pink. An aberrant specimen such as this could easily be confused with a Purple Salamander, but the latter is extremely stout-bodied and not at all likely to be found in the same habitat as the Red-backed. The Red-backed also occurs in a gray phase, when the red dorsal stripe is replaced by gray. This salamander is the most widespread in Massachusetts. It feeds almost exclusively on small insects and their larvae. Maximum length 4 inches.

PURPLE SALAMANDER, *Gyrinophilis porphyriticus porphyriticus*. A very rare salamander in Massachusetts. It is usually purplish brown in color, but it can be pink, salmon, or brown. It has a white line extending from the nostril to the eye on each side of the head. Cold rocky brooks in mountain woods provide the ideal habitat for this species. It is a large and beautiful salamander and is very stout-bodied. Maximum length is 8 inches. It cannot stand warm water in captivity. Its food consists of earthworms, insects, and millipedes. They are more common in Vermont and New Hampshire than in Massachusetts.

Salamanders with Lungs

SPOTTED SALAMANDER, *Ambystoma maculatum*. This is the largest salamander native to Massachusetts. Maximum length is 9 inches. The back is black with a number of irregular yellow spots on it. It is very common and seems to be quite feared. Its appearance causes some consternation on golf courses and at picnics. It is, of course, entirely harmless.

It makes an ideal pet for the woodland terrarium. I have had success in feeding them earthworms, tent caterpillars, sow bugs, and millipedes. It is found in a variety of places, quite often far from water.

MARBLED SALAMANDER, *Ambystoma opacum*. A rare salamander in Massachusetts. It has silvery bars on a black background. It seems to be very local, rather common in some places and absent from others. Massachusetts is the northern limit of its distribution. It is not so rare in Connecticut, with a number of recent records. Worcester County has produced several reports of this species. It is unusual in that it breeds in the fall. It feeds on many of the same things which the Spotted Salamanders will eat. Maximum length is 5 inches.

JEFFERSON'S SALAMANDER, *Ambystoma jeffersonianum*. This species is usually considered rare, but in some localities it is abundant. Such areas are parts of Essex County, where it outnumbered all other species combined. There it is found under rocks and logs near edges of water. In general appearance it resembles the Slimy Salamander, which does not range this far north, but it has blue spots on a black body. Its feeding habits are much like the Spotted Salamander. In captivity it spends much time crawling to the top of its container. Needless to say, all of these salamanders should be kept in covered homes. Maximum length is 7 inches.

NEWT, *Triturus viridescens viridescens*. This well-known salamander exists in two familiar forms. The immature "efts" or "ebbetts" are the common orange-red salamanders with two rows of small scarlet spots surrounded by black. The adults are completely aquatic and are dusky olive above and yellowish below. They also show the small scarlet spots. Both types are very common and are often kept as pets. I have had aquatic newts take bits of kidney and liver from my fingers in an aquarium. Both forms will eat insects. This is our most common salamander. Maximum length is 4 inches.

All these salamanders feed mainly upon insects and their larvae, and therefore they should be considered beneficial to man. They have numerous enemies, among which are the herons, some fish, the ribbon snake, the garter snake, the ring-necked snake, and sometimes the water snake and the bullfrog. Most of these enemies, too, are useful to man in the balance of nature, and since only a small part of their diet is salamanders, there is little danger that the salamanders will become extinct because of their enemies.

No salamander is poisonous. Some will attempt to bite, but the bite can scarcely be felt. Since most are slimy, handling them is not easy, and, with their flat heads, they can easily slither between one's fingers. Some species will sit perfectly still on one's hand for a considerable length of time and then suddenly make a dash, dropping to the ground where they can scamper away to safety. When collecting salamanders, the hands should be kept wet, but salamanders should not be carried in the hand for any length of time, as the warmth of the hand is too great, and they also may lose much of their protective coating of slime. A small glass jar with cover, and having wire mesh inserts and moist sphagnum moss in the bottom, makes a good carrying case. A wet sock can also be used.

So little is known about these elusive and secretive inhabitants of damp places that an observant amateur naturalist can add much to the knowledge regarding them. Mating habits and hibernation are subjects that need particularly careful observation.

I have not included in these notes the Red Salamander, because of the absence of recent reports; the Tiger Salamander, because there are only one or two records, and these perhaps not entirely reliable; the Mud Puppy, which is an introduced species rarely found and then usually thought to be an escaped captive; and the Slimy Salamander, which was recorded in Massachusetts only once, over sixty years ago.

It is my hope that this article will be an aid to those who have found these salamanders and have wondered what they were. The paragraphs devoted to each of the species should serve as a basis for identification. If I have aided in some small way to dispel the fears that people sometimes have of these little creatures of the wild, I shall feel that my efforts have been worth while.

Do You Want To Give?

Frequently we have comments from generous members who value the work of the Massachusetts Audubon Society, and their membership in it, and would like to contribute more to its work in conservation but do not see their way clear to do so.

Giving may entail sacrifice at times. Had you ever considered that you could encourage an advance in membership in the Society through gift memberships to friends? Or had you realized that you could add to its permanent endowment fund, or operating funds for sanctuary and educational work, by adopting some simple plan of saving such as those suggested below?

One day a week, forego buying a favorite newspaper or a candy bar. Apply the year's total to an active membership.

Reduce cigarettes smoked by one package a week and contribute \$10 a year to the sanctuary of your choice.

How about one less movie a month while you read a book at home? The \$10 saved in a year would help pay for a boy or girl attending Wildwood Nature Camp.

Most of us enjoy good food, but the omission of one dessert a week would allow the whole family to attend the Audubon Nature Theatre and purchase a book or two in the lobby.

The omission of a regular attendance at the theatre once a month might net you \$25 to give toward paying for the new Barn Museum at Ipswich River Sanctuary or the restoration of the farm cottage at Pleasant Valley.

And it would cost you nothing except a little time to save the canceled commemorative postage stamps from letters and turn them over to the Society. While worth only about twenty-five cents a hundred, many thousands accumulated would produce a tidy little sum during the year.

For members of any age, we suggest that you try baby sitting two or three hours a week. At the end of the year you might have enough to become a Life Member of the Massachusetts Audubon Society.

Mrs. Gerald Fitzgerald, of Amsterdam, New York, has had particular success in the capturing of orioles in one of Parker Reed's banding traps by attracting them with meal worms. Twenty new orioles were banded during the season and Mrs. Fitzgerald had eight returns from birds banded in previous years. She believes there were nine breeding pairs on her own sanctuary area. This fall she had a third record for a dickcissel on her property, one being found there in 1953, and seven in 1948.

Birds of Old Mexico—Part II

By ROBERT P. FOX



HUGO H. SCHRODER

Wood Ibises are Spectacular in Flight.

Cloud Forest areas are becoming hard to find, but we stopped at one, thanks to previous guidance and to spotting the tree ferns, the best single indicator of this habitat. No sooner had we stopped than the Blue Mockingbirds were heard calling from every thicket. Beside the brushy clearings a pair of Rusty Sparrows was seen. Following a few of the many trails we passed beautiful stands of ferns, many plants being over five feet tall. In the forest edge were tree ferns standing thirty or more feet high and rustling quietly in the breeze. Walking beside this forest, we were fortunate enough to identify the Rufous-browed Pepper-shrike and to spy one of the large Blue Mockingbirds along with the common Green Jay, Brown-headed Chlorospingus, Buff-throated Saltator, and other birds of the dense woods. Deeper in the forest we left the trail to explore the dark areas beneath the tree canopy. Here the forest floor was so shaded that it was free from underbrush. Birds perched high above. At this point Bob Smart had one of those problems common to all bird watchers, especially to those in a new land. He spotted a large motionless bird, red-bellied and green-chested, with a long tail and wings — a trogon, but which kind? This was a puzzle, since most highland trogons are best recognized by their tail patterns. Lack of seeing enough of

the tail cost a life bird for the list. Nearly every hour birds went unlisted for want of observing a sufficient number of field characteristics.

Leaving the tree ferns and rubber trees, the mockingbirds and trogons, we wound down the steep slope and went on toward Posta Rica, the center of a famous Mexican oil field. The countryside appeared more prosperous and much of the tropical evergreen forest had been cleared for farms. While watching the roadsides for any field birds besides the ever-present White-collared Seedeater and Blue-black Grassquit, we suddenly spied a large tree full of birds. We had heard of these trees so attractive to local birds, but were surprised to see a little blue bird, the brightest blue imaginable, sitting in this tree on a pair of brilliant red legs — the Red-legged Honeycreeper. The soft tones of the Blue-gray and Yellow-winged Tanagers feeding in the same tree were eclipsed by the glistening purple-blue of the Honeycreeper's back, the lake blue of his head and the blackish tinge of his wings. To top everything, this mite of a bird flashed yellow under-wings as it flew.

The tropical lowlands still had many other birds to offer as we drove the fifty miles to our gulfside hotel. Passing over a well-paved road we saw a large vulture flashing white as it sailed toward us. Scarcely believing our eyes, we stopped, jumped out — shocking the local drivers by our actions — and brought our glasses to bear on a King Vulture. North of its range by over a hundred miles, this handsome black and white bird sailed quite like a condor. Its wingspread was half as big again as that of the common Black Vulture. This bird was so close that the wattling on the head could be seen in the telescope. By way of contrast, we noted a Green-breasted Mango Hummingbird, and even saw the nest of this common lowland hummer twenty feet up on a three-inch branch.

As a welcome to Tecolutla, seventy-five Wood Ibis rose from the town limits high into the air, looking something like gawking black and white herons. The humid climate of the Gulf was upon us that night in Tecolutla, but we were off early next morning for a thirty-mile drive south along the coast. A ferry ride over the river was our first obstacle. The river did have a few birds, though, and — of all things — an American Coot, a rare and local breeding bird this far south in Mexico. Shore birds were nearly absent but a Man-o'-War-Bird sailed past, reminding us that the Gulf was near by. The road led along a sandy ridge bordered on the west by swamps. Here we found hawks. A flock of Plumbeous Kites darted about in the air. The small Short-tailed Hawk rose from a dead stump beside the road. Gray Hawks, often called Mexican Goshawks, were common. Land birds were limited to Tropical Kingbird and Mangrove Swallow, so we headed inland.

The next drive found us crossing the cultivated tropical land. Doves, like the Inca and the Ruddy Ground, Vaux Swift, and Gray-crowned Yellow-throat were everywhere. To remind us of home, there was an occasional Red-wing or Meadowlark sitting on a fence. Soon we were up in the Cloud Forest again with the Blue Mockingbird, only to climb higher onto the dry plain. It was cold and windy here, and the Sparrow Hawk sitting on the telephone pole looked most unhappy. Perote and then a small market place in the next town let us see how these highland natives lived. We stopped to buy some hard rolls, the only bread we trusted, and beneath the colorful yellow and red of the church and outside its yellow wall we dickered for some of the rolls. The natives liked two things. First was bright colors, from the green or red stoles and blankets to the violet and yellow of other clothing. Next, they liked to

argue about the price of something. The price is usually twice the value of the article, and it is market sport to spend a few minutes working the price to the right level. This procedure seemed universal, and we rather enjoyed it here in the colorful Mexican Highlands.

The Perote-Jalapa road was through moist pine forest that grew on piles of lava. Here we found Gray Silky-flycatcher common, a most beautiful bird and handsomer than the Crested Flycatcher of our east coast. While we watched this bird, a Painted Redstart, followed by a Coues' Flycatcher and a White-eared Hummer, caused us to stray from the car. When at some distance, we were disturbed as a local truck stopped beside our car and two Mexicans jumped out, knives in hands. The *Americanos* were farthest from their thoughts, however, for they had spotted a large orange orchid clump in the pines. Before we returned, they had climbed the tree and picked the plant, which they would sell in the market next day. We, too, had noticed several types of orchid, some little purple ones like adder's-mouth, others of fuschia color, still others, over an inch across, were white and orange. In this pine forest, orchids looked out of place, yet they were in greater abundance here than in most places we visited. This day we had passed from seacoast and marsh, through tropical lowlands, to cloud forest and highland areas of oak, pine, and prairie — one reason why birding and sightseeing in Mexico is so fascinating.

Mexican hotels never suffer from appearing similar and commonplace. The night in Jalapa was no exception. A fine small city of modern shops and narrow one-way streets mixed well with the Spanish colonial buildings that were ever present. Our hotel overlooked a modern store and a centuries-old square. We entered the lobby in our car. Probably one of the few hotels that solves its parking problem this way, we simply drove through the door. It was a tight squeeze, and there we were in the lobby and covered courtyard. Our headlights shone across this dimly lit space, and we saw the entrance to the dining room, where we were to have a very excellent eight-course meal for a little more than one dollar in American money. Even our spacious rooms had an oddity about them. A waiting room appeared to be between the room and hall in each person's quarters. The purpose of this non-roofed anteroom was never understood. After a fine night here we were off for Vera Cruz.

Rain slowed our birding. Even so, the pleasant *queek* alarm note of the Jacanas caused us to stop beside a small marsh on the way to see the tame, rail-sized birds. The black of the upper parts contrasted with the predominant rich cinnamon body and was well set off with the yellow forehead. Never realizing the bright color of this common marsh bird, we were surprised once again when this bird flew a short distance flashing yellow wing-linings. To top everything, we looked at the bird's feet. Most marsh birds have long toes, but this bird looked as though it wore snowshoes, so long were the green toes.

Vera Cruz and still raining hard, but we could see the bright greens, pinks, and blues of the buildings. Tropical Mexican cities from a distance resemble a painter's palette, so varied are the house colors. After a cup of strong Mexican coffee and some "Eggs Vera Cruz," normal fried eggs augmented by peppers, tomatoes, and most of a box of hot pepper, we were off southward toward the deep rain forest and marshland of southern Vera Cruz.

No sooner had we crossed the river at Alvarado and passed the mangrove edges than we spotted a kingfisher in a tree — and what a bird! The Ringed

Kingfisher is like a large Belted Kingfisher except that it has a chestnut front. This welcome to the great Vera Cruz marshes was followed by several Limpkins, many Jaçanas, a handsome Laughing Falcon, and three species of Kites — the Plumbeous, Double-toothed, and White-tailed. The White-tailed Kite was fairly common, and we long admired the hovering, in Sparrow Hawk style, of this nearly all-white hawk. One of our big thrills came in the only short-grass prairie we found along the road. The Fork-tailed Flycatcher appeared somewhat like the Scissor-tailed Flycatcher of Texas and North Mexico, but the tail was even longer, and the black tail and head made a truly striking contrast with the snow-white under parts as the bird sat on fence wires and small bushes. On heading south, we soon climbed into higher, more forested country, and in the areas within thirty miles of San Andres Tuxtla all of us had the most exciting birding ever.

Here it might be helpful to describe our technique for identifying the birds. First of all, we became familiar with all the families and as many individuals as possible. Next, we seldom followed songs, especially in tropical lowlands. Occasionally this method was employed, as in the case of the Great Ant-shrike we had calling from a coffee thicket, or the Montezuma Oropendola croaking from some thick vines near a forest opening. Usually we would walk along a forest edge, road, or wide path. As soon as a bird flew, we would follow it in our glasses and then get a look as it would perch briefly on the forest edge or stop in a shadow just inside the forest's barrier. Birds sang a great deal, and we soon could learn songs by watching the singing birds. As we rose higher into more temperate forests, the song-chasing methods worked better, but never could the birds be called out by "pishing," as in Massachusetts.

Back to the dense tropical lowland of the coffee plantation and the 220-foot vine-covered trees. As we stopped, we first saw a Keel-billed Toucan looking down from his perch high in a shady tree. A guttural croak, and he was off, looking for all the world like a crow-sized blackbird with a white rump spot and pushing a huge banana — his yellow bill. Several others soon were seen, for often they follow one another through the forest croaking quietly. After a half dozen of these, the rarest of the possible toucans, we hoped to see the Collared Aracari. The Blue Doves, their warm powder-blue color flashing as they darted from one shade patch to another, did not appease us. The black and yellow of the Black-cowled and the Yellow-tailed Orioles, added to that of the Black-faced Grosbeak, helped. But in this tropical aviary there should be other toucans. Finally they came, first one flash of red and yellow, then another and another as a small flock of the fantastic Aracari passed. Imagine an eighteen-inch bird, one third of which is a black and yellow bill, the next third a black head and glossy green back, with the under parts yellow and a black bar and much red on the under tail coverts, and the last third a dark tail with a bright red rump.

As it was nearly dark, we drove off to our hotel in San Andres Tuxtla. Winding down a cobblestone main street through many mud holes and past colorful stucco buildings, we finally singled out a corner one as the hotel. There seemed to be half the town present to help us into the hotel. The host and hostess, who spoke several foreign languages — though English was not one of them — greeted us, showed us to our rooms, and then ushered us into the common dining room. Our usual procedure as the last of the dishes were being cleared was to make a daily bird list. These listings in San Andres Tuxtla are unforgettable. The dozen citizens who knew or aspired to know

English arrived to listen. Two were especially to be remembered as they peered over Bob's shoulder while he turned through the 600 pages of Blake's *Birds of Mexico*. They quickly picked up the names, and their recognition of the pictures of local birds was amazing. They called them all by different names, and we wrestled with their names while they tried to pronounce ours, and they were far more adept than we. I will never forget the pleased look around the room when, after twenty minutes of talk, gesturing, and flapping, we finally understood that a Barn Owl nested in the bell tower of the church.

Next day we were off at dawn and saw tanagers. The Yellow-winged was now just another bird, but the Crimson-collared was as handsome as our Scarlet Tanager. Then there were the yellow mites of tanagers, the Euphonias, both the Yellow-throated and Scrub. A prize bird of this area was the Blue-crowned Motmot, often heard giving its twice- or thrice-repeated low-pitched *coot*. Several times we saw the bird, which is over a foot long, sitting very quietly in deep shade. When we finally saw it in better light, the short tail seemed quite unbecoming for so noble a bird, and then we noted, several inches below, something swinging back and forth like a pendulum. This was the famous racket-tipped tail, the two long central feathers with a tuft at the end then several inches of bare shaft before the basal part of the tail. A call from the bush, three ascending single-pitched buzzy notes with a fourth lower than all, bothered us for three days. At last several brief glimpses and much calling allowed us to list our Rufous-breasted Spinetail. A final sight, deep in a coffee *finca* and high in the trees near bromeliads and other tropical air plants was a trogon, the large and uncommon Massena. This, our first good look at a Caribbean Coast Trogon, with its red under parts, green upper parts, and an all-black tail, was a fitting climax on which to head west for the capital.

Our route to Mexico City brought us back to Alvarado. There were some Collared Plovers in a field near the Fork-tailed Flycatchers. A Pygmy Kingfisher flitted past along a marsh ditch — the fifth kingfisher for our Mexican list. Vermilion Flycatchers caught insects over the water hyacinths while Rose-throated Becards did likewise in palm thickets. Now we turned west and up the slope to Cordoba, a beautiful colonial city. All of us were feeling much better, now that we were out of the humid lowlands. The temperature had not been bad, and the rain hardly bothered us, but the humidity drained our ambition. Insects had been rare, save a few malarial mosquitoes. The cold air and some wonderful swordfish soup at the hotel that night made us ready for new fields to conquer.

Mountainous Mexico was ahead. This we knew as soon as we awoke, for the first sight was the mountain called Orizaba, towering over 13,000 feet, the top half snow-covered and golden in the light of dawn. Many highland birds and flowers were seen that day, as well as the ever-walking natives. Soon we passed Popocatepetl and the Sleeping Lady, two high volcanoes, and dropped into the valley containing Mexico City. This city of several million people, a mile and a half above sea level, is at the same time one of the oldest and one of the most modern on the continent. It is also one of the most beautiful of North American cities. We stopped to explore it and to visit the ultra-modern and one of the world's largest universities before heading west into the second part of our Mexican trip. Later we hope to tell of some of our thrills and bird finding along the Mexican west coast.

Enjoy The Outdoors In January

BY RICHARD HEADSTROM

Stroll through the woods and listen for the tapping of the woodpeckers as they search for insects on the trunks of trees.

Look under trees for pellets of bone and fur, evidence that owls have been hunting in the vicinity.

Break open a rotten stump and see if you can find nymphs of the wood cockroach. This is the only outdoor roach that can winter in our part of the country.

When snow falls follow the tracks of a fox and try to read their story.

Watch for Hairy Woodpeckers. As winter progresses these birds appear about houses and in orchards in search of food.

Examine the trunks of sumachs and note if the bark near the base has been eaten. If so, Cottontails have been at work.

Look for Crossbills and Redpolls in stands of evergreens.

Examine twigs of wild cherries for the varnished egg bands of the tent caterpillar.

Visit a stream not completely frozen over and look for stone flies. Some species complete their nymphal lives at this time of the year, appear in the wintry air as adults, and mate on the banks.

On logs and tree stumps observe the luxuriant growth of the scarlet-crested cladonia. This lichen, also known as British soldiers, is never displayed to better advantage than at this time of the year.

Observe how the purplish-red stems of the red osier dogwood add a touch of warmth to the snow-covered landscape.

Watch Tree Sparrows and Goldfinches as they feed in a bushy field, and note how meticulously they comb the withered stalks of composites and other wild plants for the seeds.

Examine apple twigs for pistol-shaped cases. They are the hibernacula of the pistol-case bearer.

As the dark blue fruit of the tupelo, in clusters of twos and threes, is now conspicuous on the naked branches, this is a good time to become acquainted with the tree.

On fences, in crevices of rocks, on the trunks of trees, and similar places, search for the light-buff oval egg masses of the gypsy moth. They may be destroyed to advantage.

If the day is warm and sunny, watch for the appearance of bluebottle and greenbottle flies.

If you live near the coast, visit the sea beach and look for Snow Buntings. Lapland Longspurs may sometimes be seen in their company as the birds feed on the seeds of beach grass.

Examine the withered stalks of thistles and goldenrods for pear-shaped cocoons. They are the egg sacs of the orange garden spider and serve as the winter home of the spiderlings.

In swampy places look for globular ivory berries hanging in long slender clusters from the branches of small naked trees. But do not touch — poison sumach!

A Friendly Grouse

By C. H. S. MERRILL



A Ruffed Grouse on Its Nest.

ALFRED O. GROSS

Ever since my wife and I moved to Exeter, New Hampshire, we have been delighted to find the large number of bird-watching spots in this area. One of the better ones is along that portion of the Portsmouth Branch of the Boston & Maine Railroad between Rockingham Junction and Greenland, where the track runs close to the shore of Great Bay, a widening of the tidal Piscataqua River. Here, through the winter, are to be found Bald Eagle, Great Blue Heron, a Yellow-breasted Chat, Song Sparrow, about five hundred Canada Geese, thousands of Black Ducks, and many other wintering waterfowl, such as Mergansers, Golden-eyes, Buffle-heads, and Horned Grebes.

Probably the most satisfactory result of my trips along that piece of railroad has been in getting acquainted with the section crew, including Clifford W. Brockelbank, the motorman, who was assistant to the Audubon warden at Plum Island in 1937. The training Cliff got at Plum Island has given him an alert eye for bird movements and a good working knowledge of many species. His keen observation made this story possible.

In the early part of December, the crew was engaged in replacing ties in the track near Bayside station in Greenland, and when the work had been completed the old ties were loaded on a flat car and towed to a disposal place further along the track. It was a fairly heavy load for the motor car to pull, and the rate of progress was far, far less than the speed of sound. The sound of the striving engine was, shall I say, robust. It was then that Cliff noticed a Ruffed Grouse keeping pace with them, just outside of the right-of-way fence — beyond which were dense woods. He called the attention of the others to it, and they all had a good look at the "Pa'tridge."

When they had finished their day's work and were on their way back to Rockingham, Cliff ran the section car slowly as they approached the spot where they had seen the grouse — just in case it might be there again. It was! They saw it coming through the undergrowth, up to the fence, and then rapidly walking along in order to keep abreast of them. That was interesting, even exciting. So Cliff slipped the gears into neutral and they coasted along slowly so that they might have a better look at this inquisitive bird. But the car was on a little upgrade and, after it had coasted to a stop, it began to roll back slowly. When that happened the grouse about-faced and continued to walk abreast of them. After rolling backward for one hundred feet or so, Cliff checked the car and slowly ran ahead. The grouse lost no interest but again turned around and strove to keep abreast of the car.

After going ahead for 100 feet Cliff asked his companions if he should repeat the performance, and they thought he might as well. So they did — and so did the grouse, always hurrying to keep abreast of the car. Then the car took off for home, with the men wondering if, by any chance, those on the "patrol car" had been feeding the bird. Inquiry developed that they had not. I dropped in on the men during their lunch hour one day in mid-December and was told about the curious behavior of the grouse. Since the men were going to work in the neighborhood of the bird that afternoon, I was invited to watch the performance. So I drove to Bayside and met the motor car as it reached the trysting place.

The unmuffled exhaust of that single-cylindere engine is robust, as I discovered when it reached me; but it certainly was not frightening to the grouse, for, within a minute, it could be seen hurrying through the thicket. Cliff then played his part in the performance by slowly running the car back up the grade, then letting it coast down again. It was interesting, and it was exciting; but they had work to do, and I, not dressed as warmly as they, had my mind on getting back to my automobile and starting the heater. However, Cliff said that he was going to try feeding the bird, to see how close he could coax it to the car.

Attempts at feeding did not meet with any success as long as Cliff merely threw some bread near the bird's patrolling grounds, for examination showed that it was untouched. He changed his tactics, therefore, and simply endeavored to invite the grouse to come up and see them — by kneeling on the rail and saying, "Come on, come on." Little by little, day by day, the grouse approached. At first it would only come through the fence. Later, it would come to the bottom of the embankment, then part way up the embankment, and, eventually, up to the track.

It was then that Cliff again began to bring a slice of bread, and he literally broke bread with the grouse. He would break off a piece and crumble it to the ground, then he would scratch the ground with his finger and say, "Come on, come get it." And that is what the grouse did — cautiously at first, but with alacrity as time went on.

Cliff hoped that he might in time be able to pick the bird up — or get it to sit on his knee. So he made his advances quite slowly. He shook his finger at it in a friendly sort of way — which enabled him to stroke its breast occasionally. The grouse did not mind that; in fact, when the stroking was done with the stem of Cliff's pipe the sensation was apparently rather pleasant. But all attempts to stroke its back were met with disfavor. The grouse did not become frightened at such advances; it remained there, eating from Cliff's left hand while his right (with or without the pipe) advanced slowly toward

its goal . . . then WHAM, the grouse (still eating) swatted the approaching hand with his wing.

I watched this last performance on March 5, and I was particularly amused by what happened after the men left for their work — and after some pictures had been taken of the scene. I went down to the Bay to look for the Great Blue Heron and the courting Buffle-heads. As I was returning, I heard the sound of the section car coming along the track and waited at the crossing to wave to the gang. After they passed me, I was surprised to see that another had been waiting to see the men, too. It was the grouse, down at the bottom of the embankment, but closer to the crossing than the usual trysting place. It appeared to be upset because the car was hurrying along without calling out a greeting to it, and it took flight after the speeding car. But not for far — it just flew to the regular meeting place and alighted on the track directly behind the car. After watching the car pursue its unheeding way out of sight, it stalked off into the dense woods.

While the noise of the engine serves to announce to the grouse that its friends are coming, Cliff tells me that they have been able to summon the bird even when they do not have the motor car along. Cliff also says that the bird eats only when told to do so, and that if they go off leaving a half slice of bread there, it will remain uneaten. In view of the fact that the men do not have more than five minutes a day to give to the establishment of this friendship with the grouse, it is a testimonial of the consummate care that these men have taken to win the grouse's confidence.

P.S. After the story of the friendly grouse was written, I was unable to visit the section crew until April 9. They had bad news for me. The grouse no longer appeared at the track; and the gentle dog which resides at the Bay-side station had brought a dead grouse home — just brought it home as a hunting dog would. The bird's head was battered, as though it had flown into one of the trains that passes over the Portsmouth Branch. The men concluded that it was their friend. They thought that it was better this way; for they had been apprehensive that the grouse would finish its life "in the pot" when the owner of the dense woods in which it lived returned from a winter in the South.

Cliff told me that he had finally succeeded in holding the grouse in his arms. Not only that, but he was able to pass it to young John Hackett, who was able to stroke it and handle it in the same manner that a domestic hen can be handled. John told me that the fearlessness and faith of the grouse was such that, toward the end, it would appear on the track when it heard the approach of the noisy motorcar, and it would just stay there. Men who have come to know a bird as well as these men knew that bird would not run over it — they stopped, scolded it, enticed it off the track, and went on about their daily work.

I think that the *rapprochement* built up between this grouse and the section crew was not responsible for its death, if the retrieved bird *was* the one with which they had established such close relations. The "patrol car" picks up many birds, such as flickers, pheasants, hawks, warblers, and finches, which have been struck by trains; and enginemen on the Boston-Portland expresses have told me of many birds, large and small, which have been hit by their locomotives as they speed along. The section motorcar is so unlike a freight or a passenger train that it seems unlikely that the bird would have mistaken a moving train for an "air-conditioned" section car which carried friends. The men think, and I agree with them, that this accident was nothing more than an accident. And I agree with them that it was better to have had it this way than to have had the grouse end up "in the pot."

Marlowe And The Thistle-Warps

BY DOROTHY G. WAYMAN

Life and human nature change little apparently in four hundred years. Who would not be surprised to think of Christopher Marlowe as an ornithologist — or at least an ardent bird watcher? Yet without Roger Peterson's note (*A Field Guide to the Birds*, p. 224) Americans might be excused from recognizing in Marlowe's lines his authentic study of *Carduelis carduelis britannica*, the European Goldfinch.

The first time one reads the concluding lines of "Hero and Leander," one may be forgiven for considering them poetic license. Marlowe has just described Leander's immortal plunge into the stormy waters of the Hellespont, lighted by Hero's flickering torch, and her discovery at dawn of his drowned body on the rocks below her window, whereat she dies.

"Neptune for pity in his arms did take them,
Flung them into the air, and did awake them
Like two sweet birds, surnam'd th' Acanthides,
Which we call Thistle-warps, that near no seas
Dare ever come, but still in couples fly
And feed on thistle-tops to testify
The hardness of their first life in their last;
The first, in thorns of love, that sorrows past:
And so most beautiful their colours show
As none (so little) like them: her sad brow
A sable feather covers quite,
Even like the forehead-cloth that, in the night,
Or when they sorrow, ladies use to wear:
Their wings, blue, red and yellow, mix'd appear;
Colours that, as we construe colours, paint
Their states to life:— the yellow shows their saint,
The dainty Venus, left them: blue, their truth;
The red and black, ensigns of death and ruth.
And this true honour from their love-death sprung —
They were the first that ever poet sung."

It is not the familiar black-capped goldfinch of America of which Marlowe speaks, but its British thistle-haunting peer, with dash of red across the face under the black "forehead cloth." Peterson reproduces this bird for us and adds the note: Naturalized in Bermuda; small colonies established on se. Long Island.

The *Encyclopedia Britannica* adds the wanting words: "Can be seen the year round in Britain; very fond of thistles." Marlowe doubtless believed that the goldfinch he knew feared to cross the seas, and so, poetically, associated the Thistle-warps with Hero and Leander.

Co-operation of Bird Observers Wanted

James Baird, known to many of our members for his field work in Massachusetts, requests that *unpublished* records of Arkansas Kingbirds and Dickcissels observed in Atlantic coastal States be sent to him at 83 Payson Lane, University Heights, New Brunswick, N. J.

A Kiwi I Knew

BY MERRILL MOORE



MERRILL MOORE

A hen Kiwi with her eggs, of which there are usually three or four, each weighing one fifth as much as the bird itself.

During World War II I served as an officer in the Medical Corps of the U. S. Army, and was stationed in Auckland and in Wellington, New Zealand. In both places there were active groups of persons interested in bird watching and the preservation of wildlife.

My assignment was Chief of the Neuro-psychiatric Section of the 39th General Hospital, then stationed in Auckland in a lovely park at the foot of One Tree Hill. We were near the museum, the botanical gardens, and a small zoo.

I had several wards full of neuro-psychiatric cases, mostly soldiers who were suffering from "shell shock" or "combat fatigue," and it was necessary to see that they were kept busy and entertained, because they were not allowed to go out on pass as the other patients in this hospital were.

I arranged for them to visit the museum on Monday, Wednesday and Friday mornings, and to go to the zoo on Tuesday, Thursday, and Saturday mornings. Afternoons were devoted to trips to the beach, where they could swim in the ocean, and to occupational therapy, because many of the men were interested in learning handicrafts, and some became very proficient in this work.

The high point of the visit to the zoo was the cage of the Kiwi. The Kiwi is the national bird of New Zealand. It has no wings and looks like a small

brownish-gray chicken with a long bill and strong legs. But we encountered a problem. The Kiwi ordinarily feeds by night and sleeps by day, so it was necessary for the keeper to wake up the Kiwi when my patients came to see him, which they did in large numbers. The Kiwi would sleep during the day in a small bush, and when the soldiers in their bathrobes or fatigue suits would arrive, the keeper would go and wake him up and bring him out for the soldiers to admire and photograph. After this had gone on for about a month, I received a call from the curator of birds.

He said, "I'm sorry, Major Moore, but I have to complain about your troops visiting the Kiwi. He has gotten so he can't sleep during the daytime, and we are afraid he will have a nervous breakdown." It appeared that the number of visitors was giving the Kiwi insomnia. So I went to see him myself. The bird appeared quite upset. The keeper said he was "off his feed" and no longer relished the food they gave him, and he appeared restless and would wander about looking unhappy, day and night.

I decided that something should be done about it and accepted the fact that it was my responsibility, because I had started the visits. We omitted the Kiwi from visits and diverted the attention of the soldiers to a tame ostrich and several other handsome birds. We sent the Kiwi to a rest home in the country. I weighed him and found his body weight, then determined the amount of sodium bromide that would be proper to give him as a sedative. We gave him this in small pills, which he did not seem to mind, and in a month he was sleeping properly — that is, in the daytime.

Then we managed to get another Kiwi from Wellington as a replacement, but we limited the hours and arranged for him to sleep near the fence, where the soldiers could look at him and take his picture without waking him up. We encouraged them to be quiet around the bird and not use flash bulbs, so after that we did not have any problem. But we did have trouble with the ostrich, and I will be glad to tell you about that another time.

Dinner at Annual Meeting

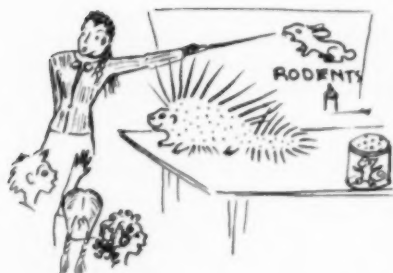
For the convenience of those attending the Annual Meeting, arrangements have been made with Boston University to serve a Pot Roast Dinner, with table service, in the University Commons — adjacent to Hayden Auditorium, 685 Commonwealth Avenue, Boston — at 6:00 P.M., Saturday, January 22. As the number which can be served is limited, an advance notice of those attending is required, members should make use of the slip enclosed in this *Bulletin* to make prompt reservation, with remittance.

Select Your Kodachromes to Show

The Annual Meeting program of the Society provides this year two half-hour periods in which members may show their best kodachromes. It is hoped that those who plan to participate in this feature will make brief comment on the type of camera and other equipment used by them, and any tricks that helped in securing the photographs. Members will be limited to five kodachromes each, all to be natural history subjects. The kodachromes should, if possible, be mailed in advance to Robert L. Grayce at Audubon House, 155 Newbury Street, Boston 16, for screening. Those unable to do this may contact Mr. Grayce at Hayden Auditorium just prior to the opening of the afternoon or evening session.

Nature Girl

BY ELIZABETH JOHNSON STICKNEY*



As I threw my suitcase into the little red jeep that cold December day of deep snows, and jumped in beside my puppy Pupicho, little did I think it would be years before I returned again to the horse ranch where I had been raised. Pupicho and I bounced and skated over the three mountain passes to Colorado Springs for Christmas.

Then I was sailing on east, driving across the Great Plains in the big fifty-to-eighty-mile-an-hour winds of January, 1950. I expected to go home in a month or two at the longest, and get a job out there. But time slipped by and it was almost summer. I found myself signing up as nature counselor for a camp in Maine. I had never been to Maine nor to a camp, but I had majored in biology in college and I had always loved nature. The camp director said I'd better have a brush-up course somewhere. She sent me several pamphlets and we both liked the sound of the Massachusetts Audubon Society Workshop in Barre, so I applied for a scholarship there.

Immediately I felt at home. Everyone at Barre loved animals and outdoors and camping, all the things I had grown up with. I enjoyed the Barre workshop, exploring the canyons and ponds and swamps, learning their nature games and techniques and attitudes, which were in such harmony with mine. One day while reading one of their wildlife books I glanced up and realized that I was late for class. Startled, I dropped the book, leapt off the porch over the ostrich ferns, and found myself face to face with the executive director of the Massachusetts Audubon Society, C. Russell Mason. Expecting a slight scolding for being late, if not for having threatened the lives of the ostrich ferns as well, I was completely surprised when Mr. Mason said, "How would you like to work for us this winter, Liz?"

Well — I would love to! And as I talked with the Audubon teachers giving the workshop courses at Barre, I was more and more sure. Mr. Mason drove me over to Pittsfield and showed me where I would be working. When I saw the Berkshire Hills in all their summer glory, and the beautiful Pleasant Valley Wild Life Sanctuary in Lenox which would be my headquarters, my mind was made up. I had never guessed there could be a job so suited to my favorite ways of thinking and living. It was to be teaching Natural Sciences and Conservation in the Berkshire County public schools, in the sixth grades mostly, a program which the Massachusetts Audubon Society carries out all over the State. I would be teaching with one other girl and Alvah Sanborn, who ran the Sanctuary and who would be in charge of this program.

On a lovely summer day in late August I arrived from Maine, and with the help of Tommie, the other teacher (Miss Arlia Tomlinson, now Mrs. Bailey), moved my things into the house, and was introduced to Pounce, the

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Illustrations by Mrs. Stickney.

little Sparrow Hawk, and to some of the snakes and turtles and squirrels with which I was to live.

Come September, I set out for my first teaching session, well equipped with a traveling "flannelgraph" rolled into what looked like a long two-ended spear, and a huge shopping bag loaded with small grab-bags which were filled with material from all "Three Kingdoms," my lesson for the next two weeks. It took me two weeks to reach all my sixteen public schools and give my one-hour lesson to nineteen classes and to five hundred and twenty-five students — my share of the classes taught by us in the Berkshires.

As I boarded the bus, sat down near the front and asked the driver to tell me when we came to my first school, I noticed the other passengers edging toward the back. For sticking out of my shopping bag, in very life-like crawling-in and creeping-out poses, were two members of the Animal Kingdom: a handsome stuffed skunk and a small stuffed alligator. Both were furnished by the Berkshire Museum, with whom we worked very closely. The bus passengers grew even more worried as rattles and scrapes and scratching noises issued from my shopping bag and the sides bulged and sank back. But they had no reason for concern. For after all, these were only frogs and toads, snakes and spiders, mice and turtles, praying mantes and butterflies, all crawling about in their confines, waiting for the little school children to pull them out (in their jars and cages) in a grab-bag game, to discuss and organize their pictures into the "Three Kingdoms" on the flannelgraph.

We always tried to make our lessons exciting and to involve the students as much as possible, for of course this makes the best atmosphere for learning. We never "taught conservation" outright; we let it appear in every lesson in some subtle, unobtrusive but convincing manner. Usually the children pointed out the need. We taught mostly by question and by having the children tell us all they knew or had noticed about something we brought, which they delighted in doing. We were interested in developing the children's reasoning power as well as their sharp observation. They often amazed both themselves and their other teachers by knowing or observing much more than they themselves ever guessed they could. And I, too, was much impressed by their ability in some of these games, carefully constructed by M.A.S. teachers. We usually brought live or real things with us if we possibly could, stuffed if not, and slides, movies or pictures otherwise. We used plenty of drawings on the blackboard and a worksheet, made up at the Sanctuary, which was given out after each lesson to be gone over before the next. This worksheet was a great aid in helping the main points of each lesson settle in the children's minds, and in tying the lessons together, as well as in encouraging the children to do more thinking on the subject on their own. There would be a clarifying discussion over the worksheet, and often the children would bring up new questions themselves, as well as the inevitable "What is it?" about whatever object we had brought with us.

The Berkshire Museum sponsored our course, along with the M.A.S., and we used their stuffed animals, shells, and portable displays all the time, to our students' great delight. And Miss Palmer, in the Children's Room, helped Tommie and me identify our "What is its?" — different minerals and specimens the children would bring in to us from around their homes. After classes, we did odd jobs around the Museum. And when the staff discovered I liked to paint, I was set to work creating large murals in the Children's Room and in the Historical Room.

On Saturdays we showed nature movies to the children at the Museum and



played quiz games, in connection with them, in the Museum's Little Theatre. We had a very large attendance and offered prizes at the end of the season, before Christmas. In the spring we led the Griscom Field Club outing, sponsored by the Museum, for the children who had done best and shown the most interest in the nature movie program the preceding fall. We explored many beautiful and strange natural spots in the Berkshires,

climbing mountains, crags and glens, following rivers and streams, seeking out the birds, plants and minerals, the mammals, amphibia and reptiles. I had never cared much for snakes. But after working up my "Reptile Lesson," I really grew quite fond of them and could put true enthusiasm into my list of their virtues. I learned to handle them happily and helped my students to do so too. Tommie had a harder time, having been raised among poisonous snakes and trained to fear them, but she put on a convincing snake-loving appearance, and Mr. Sanborn and I always tried to give her the smallest ones which she didn't mind so much.

In the spring we made a big effort to take each of our public school classes on an outdoor field trip around the school. Some schools definitely discouraged this, but most of them let their students go out with us, and the home teachers came along to take care of the discipline. I had my classes divide up into teams and make lists of the things they observed or caught. We compared notes and findings at the end of the trip, bringing in our previous lessons to explain and tie things together.

Toward the end of the year some of the school children were brought to the Berkshire Museum in Pittsfield, where they thoroughly enjoyed its Natural History displays. I had questions prepared for each student. He had to discover the answers and discuss and share them with the rest of the group before we moved on into the next room, where the children were given more questions. If all went well, for a treat we would go upstairs to the Egyptian Room and see the "real mummy."

My last class was a trip to the Pleasant Valley Sanctuary. Here we followed the lovely nature trails along the streams and side of Lenox Mountain, through the woods and fields and around the beaver ponds. Each child had his eyes open for the many different wild flowers, trees, birds, and other animals, and he would squeal with joy and excitement when he found one. We would all gather around and try to guess what it was, talk about it, then move on to some other discovery. We even caught sight of a beaver and a blue heron, and captured a few salamanders. One of the students' favorite spots, of course, was the swamp where a home teacher had fallen in the year before. We ended this trip by exploring the Sanctuary's fine Trailside Museum with its Nature Games and handsome displays which explained many of the natural objects to be found in Berkshire County. Most of these displays were set up by M.A.S. teachers. And Mr. Sanborn, having caught me painting murals at the Berkshire Museum, soon had me covering a large section of

the Trailside Museum wall with a mural on "How To Know the Birds." Other displays were set up as projects by the Day Campers, who came in the summer months to take the M.A.S.'s special course in Natural History at the Sanctuary.

The M.A.S. teachers occasionally gave talks at the P.T.A. and other group meetings, taking these opportunities to explain and further its cause in as interesting a manner as possible. The public schools had to pay for the M.A.S. course in their curriculum, so a little sales promotion was all to the good. I was called upon twice to give talks, and on both occasions set out with my grab-bags and flannelgraph to give my favorite "Three Kingdoms" lesson, for it outlined the scope of our whole course in one sitting. I had the parents play the role of students, and of course they were much more squeamish about spiders and mice and toads and snakes. So I would warn the parents to look into their grab-bags, while still resting them securely on the table, before pulling out their caged contents. The toads and turtles weren't caged, nor was a large, fluffy, baby great-horned owl, who, when finally extracted from someone's grab-bag, sat on the table blinking his huge solemn eyes and obediently swallowing hamburger. We all enjoyed these evenings thoroughly, and it seemed as though the parents were even more thrilled than their children. Men and women who "couldn't bear" snakes and mice, were handling and patting them with new understanding by the end of the evening.

I look back on my ten months with the M.A.S. with feelings of warmth and happiness. For it is a fine group of people, working together for a worthy cause with truly inspiring methods. The Pleasant Valley Sanctuary will always seem especially beautiful to me, for besides its natural loveliness and excellent care, this is the place where I first met my husband. And now we have two children of our own to help us enjoy even more the "mou'ns" and "winds" and "scurls" and "leevs" that rise and rush around us in such a wonderful way.



Memorial Shelter to be Erected at Marblehead Neck Sanctuary

An open shelter in the shape of a rotunda, designed by William Roger Greeley, will be built next spring near the center of the Marblehead Neck Sanctuary, at the crossing of two trails. The gift of Mrs. George Burroughs Proctor, of Boston, presented in memory of her husband, the structure will be fifteen feet in diameter, supported by eight granite columns, and fitted with concrete table and benches. Approved by the Marblehead Sanctuary Advisory Committee, it was also passed upon by the Board of Directors of the Society at their January meeting.

FROM THE EDITORS' SANCTUM JANUARY, 1955

The Season's Greetings

With this issue the *Bulletin* starts Volume Thirty-nine, and it may be of interest to some of our readers to refer back briefly to our first volume, of which the initial number was dated February, 1917.

The Massachusetts Audubon Society was just coming of age, having been founded in 1896, the first organization of its kind in the country. Our first president, William Brewster, had passed on and had been succeeded by the genial Edward Howe Forbush, State Ornithologist of Massachusetts at that time and later the author of that outstanding work *The Birds of Massachusetts and Other New England States* and of other books and important papers on ornithology.

Only two names among the Honorary Vice-Presidents of 1917 remain on that list today, Mrs. Augustus Hemenway (one of the founders of the Society) and W. Cameron Forbes, and two members of the Board of Directors of that time, William P. Wharton and Arthur Cleveland Bent, have now become Honorary Vice-Presidents. The Secretary-Treasurer was the late Winthrop Packard, who held that position for a term of twenty-five years. Mr. Packard also prepared the material for the *Bulletin*, with a Publications Committee, of which the late Francis H. Allen was long an active and greatly valued member.

Volume I, Number I, consisted of forty pages, and the entire volume of nine issues only amounted to 108 pages, including covers. That first issue was devoted to a list of officers and of committees, a list of local secretaries, the annual report of the directors, the treasurer's report, and a roster of the Life Members and Sustaining Members at that time. In the latter connection it is interesting to note that Life Members were any who paid not less than \$25.00 at one time; the annual dues for Sustaining Members were \$1.00, and for Associate Members, 25 cents. And these three classes of membership added up to 3,510. Compare that with our present membership of approximately 7,200 members.

That entire first volume contained no illustrations and no feature articles of any sort, but consisted almost wholly of news items relating to Audubon Society activities (of which legislative matters were of much importance), extracts from letters or conversations of our members (with Mr. Packard's commentaries), reports of various kinds, and of course the names of new members were added to our growing roster each month.

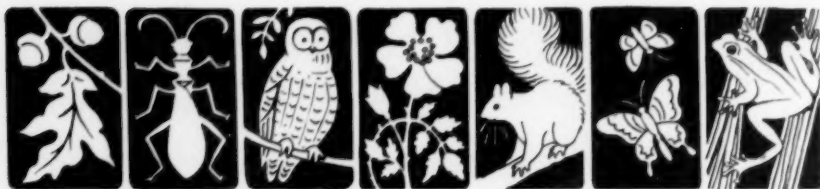
The only advertising in the *Bulletin* was limited to the last cover page, and included our Audubon Bird Chart No. 3, our Audubon Calendar (with six color plates of birds, for \$1.50) and the portfolio of plates from Eaton's *Birds of New York*; these could be secured by writing or calling at our office in the basement of the old Natural History Museum at the corner of Berkeley and Boylston Streets in Boston.

By way of contrast, Volume Thirty-eight comprised 428 pages (not including covers), with about 115 illustrations — photographs, drawings, maps, and charts. It included articles on bird watching in North and South America, Europe, and Asia (Will somebody please add Africa? Down Under comes into this present issue under the title "A Kiwi I Knew"). It also included material on mammals, insects, wild flowers, and other items of interest to the well-rounded bird student and all lovers of the great out-of-doors.

We hope You have enjoyed reading the *Bulletin* and watching our Society grow. Not only the editorial staff of the *Bulletin*, but all the staff workers at Audubon House and our scattered wild life sanctuaries, and our teaching staff, wish you all

A VERY HAPPY NEW YEAR!

J. B. M.



EDUCATIONAL NOTES

Audubon Teachers are Adaptable

There is much that is worth while and meaningful to be gleaned from watching the Audubon teacher at work. One's eyes swing fascinated from instructor to class, and back again, observing the reaction of the child and the ability of the teacher to rouse and sustain attention by word, and black-board diagram, and actual exhibit. During a week when the autumn foliage was at the peak of its brilliance, an Audubon teacher filled his car with flaming branches and, passing them out among his pupils, explained the way the different oaks and maples can be told apart. In December another teacher brought in twigs of conifers, with printed keys to the solution of their identities. The class was divided into teams and a competition organized. From the days of the first spelling bees there has been nothing like participating in a contest to put a gleam in the eyes of a child.

But it is not all cutting boughs and drawing charts and organizing games for the Audubon teacher. He must keep himself in a perpetual state of adaptation and maintain a perpetual balance between class and instructor, child and adult. On a single day the same lesson was presented to a class of regular size and to another class where the number of pupils had been doubled by the school. The overlarge group demanded a lecture-type approach, with exhibits displayed at the front of the room rather than passed around. Consequently there was little or no child-participation, and interest flagged. Later, when the identical lesson was given again to a class of normal size, it was handled in an entirely different manner. The individual pupil was drawn into the discussion; the material was placed on his desk. Interest and absorption became complete. Faces shone and gave every appearance of grasping and retaining. The conclusion to be drawn is obvious. And for the sake of the teacher as well as the child, the inadvisability of the double class, or the two-for-the-price-of-one policy of the schools, cannot be stressed too strongly.

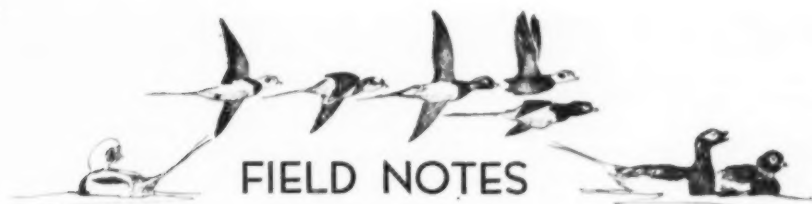
Audubon classes in conservation will continue to bring to the youthful student the bright foliage of autumn and the conifers of the winter woods. But let us work to be sure that the child will hold the oak leaf in his hand and smell the fragrant balsam instead of peering out at them across an auditorium.

Advanced Course in Bird Identification at Worcester

A series of lectures in advanced bird identification will be held at the Worcester Museum of Natural History on Monday nights, for five weeks, beginning January 10. Instructors will be drawn from the staff of the Massachusetts Audubon Society.

Staff Member in the West Indies

Robert L. Grayce, of the Audubon staff, is currently in the West Indies. He is carrying out a project concerning the ornithology of the Greater Antilles and is traveling through Puerto Rico and Hispaniola. We expect to have something from his pen on his return.



BY RUTH P. EMERY

The first half of November was cold and dry, the rest of the month warm and wet. The temperature for nine out of the first eleven days was below normal, and during the second half of the month only three days had below-normal readings. The first freezing weather of the season occurred on the 10th, with a reading of 28 degrees. November's heavy rainfall was somewhat surprising in view of the fact that eleven straight days were without precipitation, the longest dry spell of the year. However, rain fell on seventeen of the remaining days. Only a trace of snow was recorded, on Thanksgiving Day, when it melted as it fell. The worst storm of the month was on the 2nd and 3rd, when Boston received 1.23 inches in 24 hours. Twelve days had fog, the worst being on the 19th, when airlines were thrown off schedule and traffic was tied up. But in spite of varied weather conditions, field observers were able to record many interesting species on each November trip.

The LOON flight was rather poor, and among the GREBES the HORNED showed the best numbers. Very few HOLBOELL'S were noted. GANNETS were more numerous the first half of the month. 37 GREAT BLUE HERONS were seen at Chatham the latter part of the month, and AMERICAN BITTERNs could still be found on the 30th. 4000 CANADA GEESE were concentrated at Great Bay, New Hampshire, on November 6, but by the end of the month were reported in small numbers. 500 BRANT were seen at Chatham November 27, and only 350 were present at Brewster on November 30. 4 SNOW GEESE were seen flying over West Becket on November 16 (Derby). 27 species of DUCKS were reported. There were high counts of most of the fresh-water ducks during early November. A spectacular sight of sea ducks was enjoyed off Monomoy by a party of observers on November 11, when, roughly, 125,000 individuals were estimated, including OLD-SQUAW, AMERICAN EIDERS, and all three species of SCOTERS. Rarities and good numbers of the waterfowl group included 4 GADWALL, 6 EUROPEAN WIDGEON, 200 BALDPATE (Monomoy), 34 PINTAIL (Plum Island), 450 GREEN-WINGED TEAL (Plum Island), 14 SHOVELLERS (Plum Island), 18 REDHEAD (Nantucket), 111 RING-NECKS (Quitticas), 3 CANVASBACKS (Braintree), 1 male BARROW'S GOLDEN-EYE at Tilton, N. H., November 11 (Merrill and Wallace), 225 RUDDY DUCKS (Brewster), 28 HOODED MERGANSERS (Lakeville), and 33 at Newtonville. The TUFTED DUCK at Marshfield was shot by a hunter on November 13; it was retrieved but could not be saved as a wing and leg were broken.

Another SWAINSON'S HAWK was reported this month, this time from Martha's Vineyard (Katama). It was seen on November 9 by Guy Emerson and Ludlow Griscom. A GOSHAWK at Milton on November 27 (Higginbotham and Fox), and another at Meredith, N. H., November 11 (Merrills), a ROUGH-LEGGED HAWK at Rockport on November 6 (Vaughans), an immature GOLDEN EAGLE at South Chatham on November 11 (Mayo), a

late OSPREY at Lakeville on November 22 (Cushman), and a PIGEON HAWK at Beverly, November 30 (Leadbeater) round out the HAWK picture.

A CLAPPER RAIL was seen at Eastham, November 12 (Emery and party), and a VIRGINIA RAIL was found dead at Seabrook, New Hampshire, November 12 (Eldredge). Good numbers of AMERICAN COOT were noted. Up to 225 were seen at Monomoy on November 11.

17 species of shore birds were reported for the month. Highlights were as follows: 2 GOLDEN PLOVER at Gloucester on November 27 (Stricklands and Barry), LONG-BILLED DOWITCHERS at Plum Island through November 28, 34 WILSON'S SNIPES at West Newbury on November 8 (deWindt) and one at Hingham on November 28 (Clark), 3 KNOTS at Monomoy on November 11 (Griscom), 300-400 PURPLE SANDPIPERS at Scituate on November 27 (Higginbothams), PECTORAL SANDPIPERS through November 13, 1350 RED-BACKED SANDPIPERS at Nauset on November 12 and 1000 at Newburyport on November 21, and a WESTERN SANDPIPER was collected at Nauset on November 12 (Kleber).

RED PHALAROPES were reported from Rockport, Gloucester, Plum Island, and Wollaston, November 11 to 25; NORTHERN PHALAROPES were seen only at Rockport, November 4 (deWindt).

All three white-winged gulls have been seen; a EUROPEAN BLACK-HEADED GULL was observed at Plum Island on November 21 (Barry and others), one was seen at Chatham on November 30 (Hill), and another was noted at Seabrook, New Hampshire on November 13 (deWindt). 150 LAUGHING GULLS were still present at Wollaston, November 25. KITTIWAKES were reported from Rockport, Plum Island, and Nantucket, and from Hampton Beach, New Hampshire. COMMON TERNS were seen at Scituate, Chatham, and Rockport (November 16), and at Little Compton, Rhode Island. RAZOR-BILLED AUKS, BRUENNICH'S MURRE, DOVEKIES, and BLACK GUILLEMOTS were all reported from both the North and South Shores as well as from North Rye, New Hampshire. YELLOW-BILLED CUCKOOS were reported through November 15 (Greenville, Maine). SNOWY OWLS were reported from 11 places, including one individual at Springfield and one at Granby, building up to six at Plum Island on November 21. A wounded bird found in Norwood was taken to the Angell Memorial Hospital, where it is recovering the use of its wing and eating well. It will be banded and released when able to fly. A BARRED OWL remained in the Beacon Hill area for almost a month; LONG-EARED OWLS were heard calling in the early morning and at dusk in Chatham; SHORT-EARED OWLS were seen at Monomoy, Chatham, Plum Island, and Squantum. YELLOW-BELLIED SAPSUCKERS were reported from Lynnfield Center, Ipswich, and Nantucket; and from Fiskeville, Rhode Island (November 18). An ARCTIC THREE-TOED WOODPECKER was found dead in Weston, November 14, by Richard Ayers; this is the second record for Weston. Two ARKANSAS KINGBIRDS were observed in Nantucket, November 14 (Andrews), while 4 were noted in Osterville, November 14 to 27 (Manchester), and one in North Andover, November 19 (Root); PHOEBES were reported from Weston (November 7) and North Middleboro (November 18 and 20); 3 TREE SWALLOWS were seen in Boston on November 4 (Forbes), and one was noted on November 22 at Little Boar's Head, New Hampshire (Bamford and deWindt); BARN SWALLOWS were also reported from West Gloucester (November 21) and Rockport (November 28).

A CANADA JAY first appeared at the home of Mr. and Mrs. Charles Moore in Orange on November 5 and has been coming daily for tidbits. It will now take food from their hands and comes when they call "Cyrus!" We have just learned that the bird has also been seen twice at Mrs. John Care's home in Erving, which is six to ten miles from Orange. Many observers have enjoyed watching and listening to the BROWN-CAPPED CHICKADEES reported from 9 localities. Many scattered reports of RED-BREASTED NUT-HATCHES have been received, and an albino WHITE-BREASTED NUT-HATCH was present at the home of Mr. and Mrs. Ralph A. Luce in Lowell on November 13; WINTER WRENS were reported from North Lakeville and Rochester up to November 13, and from Marblehead Sanctuary up to November 23; 2 CAROLINA WRENS were seen at Rochester and 1 at Dartmouth; 10 MOCKINGBIRDS were reported; CATBIRDS and BROWN THRASHERS, as well as ROBINS, were present throughout the month; HERMIT THRUSHES were noted the first half of November, and OLIVE-BACKS were reported through November 13 from Waban, Marblehead Sanctuary, and Nahant; RUBY-CROWNED KINGLETS were noted through November 21; good numbers of PIPITS were observed, and a few CEDAR WAXWINGS were noted; a very late RED-EYED VIREO was found in Chatham on November 13 (Snyder); 12 NORTHERN and 4 MIGRANT SHRIKES were reported.

12 kinds of WARBLERS recorded during the month included 3 ORANGE-CROWNED, 1 adult BAY-BREAST, 3 CHATS, 1 HOODED, 1 CANADA, and 5 REDSTARTS. A male YELLOW-HEADED BLACKBIRD was observed at Orleans on November 14 by W. Sprague Brooks and Otto Nickerson; 5 BALTIMORE ORIOLES were reported from Weston through November 18; WESTERN TANAGERS were observed in North Fall River and East Gloucester (Athearn, deWindt); a SCARLET TANAGER was seen in Nantucket on November 12 (Andrews), and SUMMER TANAGERS were reported from Plum Island, Annisquam, Arlington, and Byfield, and from Jerusalem, Rhode Island; the BLACK-HEADED GROSBEAK remained in Barnstable throughout the month (Lyon), and a bird that answers the description of a BLACK-HEADED GROSBEAK was seen in Hingham, November 29 (B. Raymond); INDIGO BUNTINGS were found in Weston (Finch) and Concord (C. Johnson); only 11 DICKCISSELS were reported as compared with 25 last month. WINTER FINCHES were seen at many feeders and on all field trips; Willis I. Milham tells us that only a few migrants of the EVENING GROSBEAKS have passed through Williamstown and up to December 1 a permanent winter colony had not been established, and this seems to apply to the rest of the State as well; only a very few PURPLE FINCHES have been reported but PINE GROSBEAKS were seen in 30 different localities, some flocks as large as 40-50; 7 COMMON REDPOLLS were noted at Amesbury on November 10 (deWindt) and 12 at Clarendon, Vermont, November 27 (Potter); PINE SISKINS were well scattered, 100 plus seen at Tenant's Harbor, Maine (Hannemann); only 2 RED CROSSBILLS were reported and these were seen at Wilbraham on November 24 (Rosses), but WHITE-WINGS were more scattered and were noted in 10 different localities, as many as 23 counted in West Gloucester; 11 IPSWICH SPARROWS, 1 LABRADOR SAVANNAH SPARROW (collected), 2 WHITE-CROWNED, a few WHITE-THROATED, 51 FOX SPARROWS, very few LAPLAND LONGSPURS, but good numbers of SNOW BUNTINGS were reported.

A bus trip to the South Shore on November 21, under the leadership of competent South Shore birders, failed to turn up any really exciting birds, but this was owing to the inclemency of the weather.

On November 28 DEER were present in a fairly well-settled part of Weston, where a buck, a doe, and twin fawns were seen feeding on fallen apples in a yard. Oscar Root reports seeing an OTTER in North Andover, November 14, and Davis Crompton saw 2 BOBCATS in Dana, November 19.

The Voice of Audubon

The magical KEnmore 6-4050 has been ringing day and night since it was installed in early December. On the very first day 215 calls were received in 3½ hours, and the total for the entire day was 500. During the week that followed, calls were coming in at the rate of one a minute. All the Boston newspapers reported the installation of the Automatic Answering Set and the service to be given by the Massachusetts Audubon Society to members and the interested public. *Time*, *Newsweek*, and *Business Week* also announced it. A tape recording of this service was flown to Australia for broadcast.

As was to be expected, messages of many unusual and unheard-of birds were recorded by the curious or the uninitiated. One mother was heard telling her little girl that it was Santa Claus talking and that she could tell him what she wanted for Christmas. Another called and wanted to buy the record she had just heard. Several have recorded their appreciation of the new service and hope that it will be continued. Here is a typical daily tape recording: "THIS IS THE VOICE OF AUDUBON. There is a male EUROPEAN WIDGEON in Plymouth, PINE GROSBELLS in Newton Highlands, a NORTHERN SHRIKE in South Lincoln, a BULLOCK'S ORIOLE in South Hadley Falls, BLACK-HEADED GROSBELLS in Ipswich and Barnstable, and a CANADA JAY in Orange. Please leave your message after the double signal."

Call KEnmore 6-4050 and tell us about *your* special birds. You have thirty seconds in which to record your message — and be sure to leave your name!

R.P.E.

Audubon Field Trips

SUNDAY, JANUARY 23. To Newburyport and Cape Ann. Two chartered busses will leave Audubon House, 155 Newbury Street, Boston, at 8:15 A.M., returning to Audubon House at 7:00 P.M. One bus will cover Cape Ann and the other bus the Newburyport area. Those who wish to specify a choice of bus may do so, and assignments will be made up to the capacity of each bus. At the end of the trip, both busses will meet at Ipswich River Sanctuary, where coffee and doughnuts will be served. Bring lunch. Fare and guide fee, \$3.00. Fee for those using private cars and following busses, 75 cents per person. Reservations should be made in advance, and if by telephone before 5:00 P.M. Cancellations cannot be accepted after noon on Friday, January 21.

SUNDAY, FEBRUARY 13. Trip to Cape Ann for winter birds. Chartered bus will leave Audubon House, 155 Newbury Street, Boston, at 8:15 A.M., returning to Audubon House at 7:00 P.M. Bring lunch. Fare and guide fee, \$3.00. Fee for those using private cars and following bus, 75 cents per person. Reservations should be made in advance, and if by telephone before 5:00 P.M. Cancellations cannot be accepted after noon on Friday, February 11.



MEMBERSHIP NEWS

Forward Into the New Year

A brick manufacturer once was asked to what he attributed his success in business. To this he replied that he always endeavored to have each batch of bricks he turned out better than the last. A homely illustration perhaps, and yet it may hold a lesson for each of us. It may hold a lesson for us as a Society, for as we look forward into the New Year we realize that many of the activities and efforts that will engage our attention are much the same as those carried on in 1954, but the challenge is to produce greater and more far-reaching results for conservation through the same mediums. Our experience of the year that is past, and of all the years, should prepare us to do a better job in 1955. Will you, our members, help us, that together we may share in an increasingly rewarding service for the cause to which we have given our support? A Happy and Prosperous New Year to all!

This month we welcome the following new members and extend our continued thanks and appreciation for the increased support from older members.

Contributing Members

- **Barker, Mrs. B. Devereux, Boston
- **Bird, Miss Ann C., E. Walpole
- **Oakes, Mr. and Mrs. Malcolm,
N. Y., N. Y.

Supporting Members

- Adams, Miss Terry, Boston
- *Alexander, Mrs. Edward H., Natick
- Blanchard, Mrs. Hazen, Woodstock, Vt.
- Blanke, Mrs. Lawrence M., Dedham
- Brown, Miss Eleanor M., Athol
- Capron, Robert P., Westborough
- *Edge, Mrs. C. N., New York, N. Y.
- Hall, Dr. Francis C., Nahant
- *Hallowell, Dr. Phillips, Westwood
- *McKean, Mrs. Arthur G., W. Roxbury
- Mixter, Dr. William Jason, Woods Hole
- *Morse, Mrs. Arthur H., Weston
- *Rafton, Mrs. Harold R., Andover
- Sampson, Mrs. H. LeBaron, Cambridge
- *Sylvester, Miss Gladys, Winthrop
- Van Huysen, Dr. William T., Weston
- Van Vleck, Miss Marion G., Weston
- *Winslow, Mrs. Andrew N., Jr., Boston

Active Members

- Acton, Edward, Belmont
- Akerbloom, Mrs. Eric, Brockton
- Alexander, Miss Margaret A., Brockton
- Anderson, Mrs. John A., Lynnfield Ctr.
- Bagley, Miss Elizabeth P., Georgetown
- Ballas, Miss Eia, Boston

*Transferred from Active Membership

**Transferred from Supporting
Membership

- Bartlett, Mrs. J. Kemp, III,
Cockeysville, Md.
- Benoit, Armand A., Worcester
- Benttinen, Ted, Falmouth
- Bischoff, Mrs. Donald, S. Duxbury
- Blair, Miss Charlotte, Boston
- Bradstreet, Mrs. Arthur R., Brockton
- Brewster, Mrs. Benjamin H., Jr.,
Owings Mills, Md.
- Brunn, Mrs. Robert R., Lexington
- Burrage, Mrs. C. V., Boston
- Cross, Mrs. Edward, W. Bridgewater
- D'Hondt, Mrs. Blanche M., W. Roxbury
- Drury, William C., Clearwater, Fla.
- Dunham, Mrs. Robert C., Quincy
- Ensher, Mrs. Napoleon J.,
W. Bridgewater
- Eustin, Miss Esther H., Wellesley Hills
- Fairbanks, Mrs. Rollin J., Lincoln
- Fincke, Mrs. Donald M., Lynnfield
- Greene, Mrs. Theodore A., Chestnut Hill
- Gumage, Mrs. Peter, Marblehead Neck
- Harding, Mrs. Robert C.,
Marblehead Neck
- Haviland, Theodore, II,
New Canaan, Conn.
- Hoeffel, Mrs. Gerald, Truro
- Hudson, Parker, Arlington
- Johnson, Miss Charlotte, Concord
- Kennard, Dr. Harrison E., Waltham
- Lynnfield Junior High School,
Lynnfield Ctr.
- Macy, Mrs. Burt, Melrose

Malm, George P., Worcester
 Margolis, Miss Ruth, New York, N. Y.
 Newton, Mrs. Robert G., Lynnfield Ctre.
 Perkins, Mrs. Erman, Arlington
 Preble, Miss Frances B., Belmont
 Rockwell, John A., M. D., Cambridge
 Rutter, Mrs. Nathaniel P.,
 Marblehead Neck
 Sanborn, Frederic H., Beverly
 Searle, Mrs. John E., Jr.,
 Marblehead Neck
 Seymour, Miss Carolin, N. Amherst

Sias, Mrs. Ralph F., Lynnfield Ctre.
 Smith, Mrs. Clarence, Arlington
 Stone, Gregory H., Hopkinton
 Thayer, Mrs. Richard S.,
 Marblehead Neck

Thomas, Mrs. Laurence N., Cohasset
 Tuck, Mrs. Louis B., Lynnfield Ctre.
 Tucker, Miss Marjorie, Boston
 Tupper, Mrs. A. F., Jr., Boston
 Wein, Mrs. Dalton H., Millis
 Whitford, Miss Helen R., Lowell
 Winslow, Mrs. Myrtle W., Brockton

Among Our Contributors

ROSALIE EDGE (Mrs. C. N. Edge) of New York City, a lifelong campaigner for conservation and the founder of the Emergency Conservation Committee, is best known for having established Hawk Mountain Sanctuary, stimulating its development, and maintaining a tireless interest in its activities.

MERRILL MOORE, M.D., Boston psychiatrist and poet, served during World War II as a colonel in the Southwest Pacific. A Fellow of the American Psychiatric Association and of the American Association for the Advancement of Science, Dr. Moore has also published many volumes of poetry, his most famous being *M—1000 Autobiographical Sonnets*. Readers will recall his "This Duck with a Broken Wing" in the November *Bulletin*.

ELIZABETH JOHNSON STICKNEY, as an Audubon teacher in previous years, carried on a most valuable piece of work in conservation education for the Society. A tangible evidence of part of her work is to be seen in the murals at the Berkshire Museum in Pittsfield, and in the bird identification charts in the Trailside Museum at Pleasant Valley Wildlife Sanctuary.

DAVID SARGENT, of Peabody, chosen Massachusetts Conservation Youth for 1954 by a committee appointed by Governor Herter, has also been recognized for his outstanding work in the 4-H entomology program. He has worked during the summer at the Wildwood Nature Camp, and he is at present attending the University of Massachusetts.

ROBERT P. FOX, of Wollaston, serves as guidance counselor for the Quincy school system. Members of the Society

have become acquainted with him on camp-outs and through his leading of numerous field trips. Part One of his Mexican adventures appeared in the December *Bulletin*.

The attention of our readers is called to the new headings for several of the Bulletin pages, and to the artists who have given so generously of their time and talents. To Mrs. Foye we are indebted for the headings for "Book Reviews" and "Educational Notes." Mr. Drury supplied the heading for "Field Notes." And the headings for "Sanctuary Notes," "Membership News" and the calendar "Looking Ahead" have been contributed by Mr. Kane.

CAROLINE FOYE, wife of the director of the Ipswich River Wildlife Sanctuary, worked as a commercial artist for two years after her graduation from the Massachusetts School of Art. She is responsible for the decorative signs at the Sanctuary. She has also had considerable success painting wildflowers.

WILLIAM H. DRURY, JR., Assistant Professor of Botany at Harvard and an accomplished artist, was field leader last June for the 1954 Bylot Island Expedition, sponsored by grants-in-aid from the Arctic Institute of North America and the New York Zoological Society.

HENRY B. KANE, well-known author and illustrator, was also instrumental in developing the electronic flash photographic technique. He has written several books for children, and he will be remembered by many readers for his beautiful drawings for *Cache Lake Country*, by John J. Rowlands, and Sally Carrighar's *Icebound Summer*.

M. B. S.

LOOKING AHEAD



- January 8 Continuing "ECOLOGY WORKSHOP." Monthly field trip meetings until June.
- January 10 First meeting of ADVANCED BIRD IDENTIFICATION COURSE, WORCESTER. Worcester Natural History Museum. Continuing for five weeks.
- January 11 First meeting of "WEB OF LIFE." Tuesday morning Introductory Course in Bird Identification. Audubon House, 10:15-11:45. Continues to March 22. Tuesday evening course, Audubon House, 7:30-9:00. Continues to March 8.
- January 19 Annual Luncheon, The Trustees of Reservations. 1:00 P.M., Sheraton Plaza Ballroom.
- January 22 ANNUAL MEETING, Massachusetts Audubon Society. 2:00-9:00 P.M. Hayden Hall, Boston University.
- January 23 AUDUBON FIELD TRIP by bus to Newburyport, Cape Ann.
- February 3 "TIP O' THE MITTEN." Color film by Olin S. Pettingill, Jr. Sage Hall, Smith College, Northampton, 8:00 P.M.
- February 4 "TIP O' THE MITTEN." Horticultural Hall, Worcester, 8:00 P.M.
- February 5 "TIP O' THE MITTEN." New England Mutual Hall, Boston, 10:30 A.M.
- February 13 AUDUBON FIELD TRIP by bus to Cape Ann.
- February 16 "ADVENTURING IN THE EVERGLADES." Color film by Hal H. Harrison. Northampton High School Auditorium, 7:30 P.M.
- February 18 "ADVENTURING IN THE EVERGLADES." Marblehead High School Auditorium, 7:30 P.M.
- February 19 "ADVENTURING IN THE EVERGLADES." New England Mutual Hall, Boston, 10:30 A.M.
- March 5 "WILD TRAILS OF NEW ENGLAND." Color film by Richard Borden. New England Mutual Hall, Boston, 10:30 A.M.
- March 9 "WILD TRAILS OF NEW ENGLAND." Richard Borden. Northampton High School Auditorium, 7:30 P.M.
- March 11 "WILD TRAILS OF NEW ENGLAND." Richard Borden. Beverly High School Auditorium, 7:30 P.M.
- March 11-13 National Wildlife Institute meeting in Montreal.
- March 13-19 SPRING FLOWER SHOW, Boston. Mechanics Hall. Visit the Audubon booth.
- March 14-16 North American Wildlife Conference, Montreal.
- March 16 First meeting of "WEB OF LIFE," Intermediate Conservation and Natural Science Course. Audubon House, 10:00-12:00. Field trips, March 23 to May 18.
- March 17 "PANAMA VENTURE." Color film by Lorus and Margery Milne. Sage Hall, Smith College, Northampton, 8:00 P.M.
- March 18 "PANAMA VENTURE." Lorus and Margery Milne. Horticultural Hall, Worcester, 8:00 P.M.
- March 19 "PANAMA VENTURE." Lorus and Margery Milne. New England Mutual Hall, Boston, 10:30 A.M.
- March 24 First meeting of INTERMEDIATE BIRD IDENTIFICATION COURSE. Audubon House, 10:15-11:45, Thursday mornings to May 26.
- March 27 AUDUBON FIELD TRIP by bus to Sudbury Valley.

- March 29 First meeting of "THREE KINGDOMS," Tuesday morning Introductory Conservation and Natural Science Course. Audubon House, 10:15-11:45. Continues to late May. Tuesday evening course, Audubon House, 7:30-9:00. Continues to May 17.
- April 6 First meeting of "INTERMEDIATE BIRD IDENTIFICATION COURSE." Audubon House, 7:30-9:00 P.M. Continues Wednesday evenings to May 25.
- April 7 First meeting of "WEB OF LIFE," Thursday evening Intermediate Conservation and Natural Science Course. Audubon House, 7:30-9:00. Continues to May 19.
- April 24 AUDUBON FIELD TRIP by bus to Westport.
- April 28 THURSDAY EVENING WALKS at Arcadia Sanctuary, Northampton. Continuing through May, except May 12.
- April 29 Bird and Arbor Day. Date to be confirmed.
- May 1-7 AUDUBON WEEK.
- May 2-6 BOSTON PUBLIC GARDEN WALKS. A leader will be on hand to point out birds from 12:30 to 1:30.
- May 7 STATE-WIDE AUDUBON WALKS and OPEN HOUSE AT AUDUBON SANCTUARIES.
- May 9-13 BOSTON PUBLIC GARDEN WALKS, 12:30 to 1:30.
- May 13-15 CONNECTICUT VALLEY CAMPOUT.
- May 22 AUDUBON FIELD TRIP to North Shore.
- June 8-10 AUDUBON TEACHERS CONFERENCE, Mount Greylock.
- June 10-12 BERKSHIRE CAMPOUT.
- June 15-25 CONSERVATION AND NATURAL SCIENCE WORKSHOP, Barre, Massachusetts.
- July 3-Aug. 13 WILDWOOD NATURE CAMP, Barre, Massachusetts.
- July 5-Aug. 15 NATURAL HISTORY DAY CAMPS at Audubon Sanctuaries. Special two-week session in June for Pleasant Valley Sanctuary Explorers Club.
- August 21 AUDUBON FIELD TRIP by automobile to Crane's Beach, Ipswich.
- September 7-9 AUDUBON TEACHERS CONFERENCE, Nickerson State Park, East Brewster.
- September 9-11 CAPE COD CAMPOUT.
- October 16 AUDUBON FIELD TRIP by bus to Essex County.
- October 25-30 American Ornithologists' Union meeting in Boston.
- November — AUDUBON FIELD TRIP by bus to South Shore. Date to be announced.
- December 21 CHRISTMAS TREE FOR THE BIRDS, Boston Common.

The Trustees of Reservations to Honor Judge Robert Walcott

At the Annual Luncheon Meeting of the Trustees of Reservations, to be held on January 19, at 1:00 P.M., in the Sheraton Plaza Ballroom, Copley Square, Boston, Judge Robert Walcott will receive the Conservation Award made each year by the Trustees in recognition of distinguished service for conservation. Judge Walcott is president of the Trustees of Reservations as well as of the Massachusetts Audubon Society, and has given a lifetime of devotion to the cause of conservation. Our warm congratulations to our president on this happy occasion. Tickets for the luncheon may be obtained by writing Laurence B. Fletcher, Secretary, The Trustees of Reservations, 50 Congress Street, Boston 9. The price of the luncheon is \$3.50, including tax and gratuity.

PROGRAM

ANNUAL MEETING

Massachusetts Audubon Society

Saturday, January 22, 1955

HAYDEN HALL, BOSTON UNIVERSITY

685 Commonwealth Avenue, Boston

JUDGE ROBERT WALCOTT, *presiding*

Afternoon Session

- 2:00 GREETINGS TO THE MASSACHUSETTS AUDUBON SOCIETY.
Dean Elsbeth Melville, of Boston University.
- 2:10 VANISHING WILDLIFE. Color sound film by Richard Borden, of Borden Productions, Inc., Boston.
- 2:30 Annual Business Meeting, Massachusetts Audubon Society. Reports of progress during 1954.
- 3:00 COOK'S CANYON WILDLIFE SANCTUARY. A presentation of the work of this Conservation Education center by David R. Miner, Sanctuary Director, and the Worcester County Audubon staff.
- 3:30 Pause to get acquainted and to see exhibits, including twelve new paintings by Roger Tory Peterson displayed through the courtesy of John Morrell and Company. Mr. Peterson's paintings will also be exhibited at the Childs Gallery, 169 Newbury Street, Boston, for several days after the Annual Meeting.
- 4:00 SUCCESS IN NATURE PHOTOGRAPHY. Thirty minutes of selected kodachromes by Audubon members.
- 4:30 WILD BIRD PORTRAITS. Illustrated in color by R. Torrey Jackson, Marblehead.
- 4:45 BIRDS OF THE WORLD ON POSTAGE STAMPS. By C. Russell Mason, Executive Director, Massachusetts Audubon Society. Illustrated with kodachromes by G. Blake Johnson.
- 6:00 DINNER, BOSTON UNIVERSITY COMMONS. Price \$1.75 (including tax and gratuities). By reservation only.

Evening Session

- 7:00 MORE SUCCESS IN NATURE PHOTOGRAPHY. Thirty minutes of kodachromes by Audubon members.
- 7:30 ORNITHOLOGICAL HIGHLIGHTS OF 1954. Five-minute presentations by Audubon members and staff, including kodasides and motion pictures of Tufted Duck, Black Skimmer, Black-headed Grosbeak, and other rare finds of the year.
- 8:00 BIRDS OF THE PLUM ISLAND REGION. By Ludlow Griscom, Research Ornithologist, Museum of Comparative Zoology, Harvard University. A discussion of an outstanding bird area which has been covered thoroughly over the years by many observers and particularly by the speaker.

Hostesses

Mrs. Donald C. Alexander	Mrs. Eric Cutler	Mrs. C. Russell Mason
Mrs. Clarence E. Allen	Mrs. Roger Ernst	Mrs. John B. May
Mrs. Oakes I. Ames	Mrs. Maxwell E. Foster	Mrs. Rosario Mazzeo
Mrs. Richard Borden	Mrs. Ludlow Griscom	Mrs. Lawrence K. Miller
Miss Rachel S. Bruce	Mrs. Philip B. Heywood	Mrs. Alva Morrison
Mrs. Elliott B. Church	Miss Louisa Hunnewell	Mrs. James F. Nields, Jr.
Mrs. G. W. Cottrell, Jr.	Mrs. Edwin C. Johnson	Mrs. John Richardson
Mrs. Lee W. Court	Mrs. Ralph Lawson	Mrs. Sydney M. Williams

Annual Winter Field Trip To North Shore

Sunday, January 23

(See notice elsewhere in *Bulletin*)


1955

Audubon Nature Theatre

SATURDAY 10:30 A.M.

NEW ENGLAND MUTUAL HALL

Boston



OLIN PETTINGILL JR.

"Tip o' the Mitten" Feb. 5

SPECIAL SEASON TICKET

On sale for Boston series
until January 22

Adult \$3.30 Youth \$1.60
tax inc.

**FOUR FEATURES
FOR PRICE OF THREE!**

***"Adventuring
in the Everglades"* Feb. 19**

SINGLE ADMISSIONS

After January 22 only singles
will be sold

Adult \$1.10 Youth \$.50
tax inc.

***"Wild Trails
of New England"* Mar. 5**


Other showings under the joint
sponsorship of the Society and
local organizations in Attleboro,
Barre, Beverly, Holyoke, Marble-
head, New Bedford, Newburyport,
Northampton, Pittsfield, Taunton,
Weston, and Worcester.

**For further information
and tickets, address Audu-
bon Nature Theatre, 155
Newbury St., Boston.**

"Panama Venture" Mar. 19



HAL H. HARRISON



DICK BORDEN



LORUS and MARGERY MILNE



SANCTUARY NEWS

Editor's Note: With the new year, and the new headings, a new policy is also being essayed. In the interest of saving the sanctuary directors valuable time, and with the hope of avoiding redundancy and duplication, we are incorporating their monthly notes into a summary in which we shall strive to maintain the high literary level of the reports and continue to stimulate the interest of our members in their sanctuaries. We are sure that we express the sentiments of all of our readers when we thank and praise the directors, not only for their faithfulness in sending in their accounts and for the sustained excellence of their work, but also for having taken the time from their full and busy schedules to provide such continuingly fine material.

With the last of the fall's bright leaves gone from the trees, the early influx of winter finches has been especially welcome. Pine Grosbeaks in particular were unusually numerous, with as many as fourteen in a flock at Ipswich River. At Moose Hill they fed on the fruits of ornamental crabs. At Pleasant Valley the first arrived on the first day of the month. Evening Grosbeaks were reported from all of the sanctuaries, but in relatively small numbers and erratic, irregular groups. Purple Finches were plentiful at Moose Hill, especially at the feeders after the first snowfall, but they continued scarce at Ipswich River.

Elmer Foye found the Grouse count higher than last year, and Ed Mason listed Grouse, as well as lingering Robins and a Red-eyed Towhee, still present at Arcadia at the end of the month. The eight Mourning Doves at Moose Hill continue to frequent the feeders, and will probably, according to established tradition, overwinter. Ruby-crowned Kinglets have also been numerous there along the Evergreen Trail.

Waterfowl at Arcadia seemed fewer in numbers this November. Pied-billed Grebe, Great Blue Heron, and one Canada Goose flying out of Arcadia Marsh were seen only during the first week of the month, as were Baldpates and Pintails, with no Wood Duck after the sixth. Ed Mason noted that the ratio of Mallards to Blacks continued to increase, although the total numbers were down. Professor Eliot found a male Canvas-back on the twenty-fifth, a rare record for Arcadia, and Davis Crompton reported a Ruddy Duck there on the seventh. Early in the month Elmer Foye counted Buffle-head, Blue-winged Teal, many Blacks, and a few Mallards and Golden-eyes at Ipswich River, and more than twenty-two Coot every day from the eleventh on.

A large buck Deer was observed at Pleasant Valley feeding half way across the biggest beaver pond. "When he saw me," wrote Alvah Sanborn, "instead of running he crouched or squatted until his under parts were in the water, and he held his neck outstretched along the surface too. He stayed that way for five minutes or more and didn't move until he heard my movement in the underbrush." Three Deer were seen at Ipswich River on November second.

At Cook's Canyon a hunter brought in a live Porcupine, which David Miner took down to the Porcupine Den. There he found fresh droppings, indicating that the den was already occupied. Now that there are supposedly two Porcupines in residence, it is interesting to speculate on the prospects of a family to delight the Wildwood campers next summer.

Ricky, the sanctuary Raccoon at Moose Hill, is responding to the advent of cold weather with increased lethargy but with no observable diminution of appetite.

As for celebrities at the sanctuaries, David and Sylvia Miner were the stars of a half-hour radio program on Station WTAG, Worcester, on Sunday, the fourteenth, bringing before the public the timely matter of winter bird feeding. And Devereux Butcher, executive director of the National Parks Association, paid Pleasant Valley a visit at the end of the month.

November was a busy time throughout the State, with the shortening daylight hours filled to the brim with outdoor activities. At Arcadia the Advisory Committee members completed the bridge through Oakitowhee Swamp late on the last Saturday afternoon. Now visiting school classes exploring the Woodcock Trail will have new territory for discovery. Workers found skunk cabbage already pushed up three or four inches at the edge of the bridge, and fat buds on arrowwood viburnum and blueberry promising flowers for the coming spring.

At Pleasant Valley a new workshop area was constructed in the basement of the director's cottage, with a work bench, tool board, etc. Cutting and thinning was carried out on the Beaver Lodge and Golden-wing Trails. The gift of one hundred dollars from the Stockbridge Bowl Association helped arrange for the opening up of the view of the bowl from Bald Head and the preservation of this magnificent vista.

Redecorating at Moose Hill has enabled the Bussewitzes to go into the new year with a freshly painted headquarters, which all are invited to inspect. And at Ipswich River the new Sanctuary Museum and Meeting Room has been completed.

With the coming of winter Tern Island will look empty as compared with midsummer when flocks of Terns are nesting there; but careful examination of the island may reveal some wintering Meadowlarks, a flock of Snow Buntings and Longspurs, a lingering Winter Yellow-legs, or even a Short-eared Owl. Much the same conditions will prevail at Sampson's Island, though there the limited thickets of scrubby pines and bayberry will prove attractive shelter for wintering Myrtle Warblers, and along its beaches almost-white Sanderlings in their winter plumage will be nearly invisible against the sand as they scurry along the tidal edge. Come summer, both our Cape sanctuaries will be lively with the cries and darting forms of Terns and Gulls, and during migration many of the shore birds will pause to rest and feed.

The hurricane damage has been cleared from the trails of Marblehead Neck, and the attractive entrance and parking space encourage bird watchers, who may find that the heavy growth of trees and shrubs and tangled vines is furnishing cover for wintering finches and sparrows. Next summer visitors will have a meeting place and shelter from inclement weather through the generosity of Mrs. George Burroughs Proctor, who is having erected near the center of the sanctuary a fine granite and slate pavilion in memory of her husband.

Storm damage at Nahant Thicket took down many of the big maples along the Wharf Street side. The trails are being cleared, but some of the stumps and trunks and brush will be left to provide hiding places for birds and dens for mammals. The log bridge will also be restored, with the help of local youth groups. The New Year ushers in a program planned by the Sanctuary Advisory Committee to acquaint more Nahant residents with this oasis for bird migrants and to encourage leadership in the area in the natural history field.

M. B. S.



BOOK REVIEWS

OUT IN THE OPEN. By Ray Koon. Little, Brown & Company, Boston. 1954. 239 pages. \$2.95.

From ten years of contributions to the columns of the *Boston Traveler* and the *Boston Herald*, and in response to requests from many readers, Ray Koon selected one hundred articles to include in this book. The material covers methods in handling soil and plants that Mr. Koon found most successful over a lifetime of gardening and research. Included are valuable suggestions on soil improvement, as well as hints on the culture of flowers and vegetables; fruits for the home garden; shrubs, trees, and vines of distinction; and how to overcome some of the gardening hazards. Comments of neighbors, anecdotes of outdoor living, and worth-while horticultural practices are bound together with Mr. Koon's enjoyable humor to make the book rich and readable. His use of the stuffed Great Horned Owl in controlling small animals in the garden and his tests of Dog Thwarters bring many a chuckle and will stimulate the reader to finish the remaining chapters before laying down the book. As director of the Waltham Field Station for forty years, Ray Koon speaks with the authority of the expert, also with the philosophy of fine living, drawn from the gardens, that so endeared him to his friends and associates. His passing so quickly after his retirement is regrettable, for we should have liked to have much more from his pen for our libraries.

C. RUSSELL MASON

WAYS OF THE ANT. By John Crompton. With 8 drawings by J. Yunge-Bateman. Houghton-Mifflin Company, Boston. 1954. 242 pages. \$3.50.

This is another book by the author of *Life of a Spider*, and indeed it is a worthy successor to that volume. Mr. Crompton describes here the many and fascinating habits of the ants; their holding of slaves, their tending of aphid cows, and a multitude of other interesting facts, mostly described from firsthand observation. The book is written in a chatty and informal style that is quite effective in a book of

this type, although we sometimes wish Mr. Crompton would stop beating round the bush and get to the point. One wonders a little at some of his conclusions, for example his assertion that ants have the power to reason, and we may object to his attributing human characteristics to an insect. But if you are interested in animals with six legs, or, more specifically, ants, you ought to read *Ways of the Ant*.

CHARLES WALCOTT

FINE BIRD BOOKS: 1700-1900. By Sascheverell Sitwell, Handasyde Buchanan, and James Fisher. Collins & Van Nostrand, London and New York. 1953. viii, 120 pages, 38 plates. \$50.00.

This is truly a magnificent volume, a "Fine Bird Book" in its own right. It covers fine bird books, wherever published and in whatever language, between the dates of 1700 and 1900. This was a period when the printer's art had attained a very high standard of excellence and when wealthy men everywhere took pride in being "patrons" of the arts and sciences. As Mr. Sitwell expresses it, "the Great Bird Books of the nineteenth century came just in time to record the era of bird exploration, the gorgeous and formal livery of the birds lent itself to drawing and colour, and the destructive rise in costs which now makes an enterprise of the kind a practical impossibility, had not begun." Picture, if you can, the difficulties an ornithologist would encounter today, no matter how great his ability or reputation, if he attempted to find subscribers in advance for a bird book at the price of Audubon's work in the 1830's, eight hundred to one thousand dollars, at its present-day equivalent of several times the original subscription cost. There is nothing published in recent years to compare with the books of Audubon, Gould, Elliott, and others in the magnificence of their illustrations, the beauty of their format, and the scope of their subject matter.

This is a big book, too large to be used except when spread open on a library table (it weighs four pounds and the pages measure 13½ by 19¼ inches). The sixteen

Book Reviews (Cont.)

color plates are reproduced by an eight-color lithographic process, on specially prepared heavy paper, and any one of them is worth removing and framing. The twenty-two black and white plates are also excellent, fine examples of collotype printing. The Audubon plates selected from his huge elephant folio work are, of course, reduced in size, but the Gould plate of the Resplendent Trogon, or Quetzal, was considered so outstanding that it was printed full size on a double page spread, 13½ by 38½ inches! Notable among the illustrations are those of the Roseate Parakeet, the Pheasants and Birds of Paradise, several of Audubon's best, and a study of a hooded Greenland Falcon perched on a falconer's gauntlet. My one regret is that the single Catesby illustration, our familiar Flicker by that pioneer of American ornithologists, is not in color.

Sascheverell Sitwell has written interestingly and well of these early bird books and their famous or little-known authors and illustrators. There is a very fine bibliography, annotated, by Handasyde Buchanan and James Fisher, which stirs one's desire to visit the great libraries and museums where such volumes are finding their last resting places. The few such volumes which reach the secondhand dealers or book auctions are all too likely to be broken up and their illustrations peddled out to the highest bidder, when they should, instead, be preserved intact for students and lovers of fine books. This beautiful volume merely gives one a taste of their riches.

JOHN B. MAY

WILDLIFE IN ALASKA. By A. Starker Leopold and F. Fraser Darling. Illustrated by Bob Hines. Sponsored by the New York Zoological Society and The Conservation Foundation. Ronald Press, New York. 1953. 140 pages. \$2.75.

This book supplies facts for guiding our thoughts on the problem of Statehood for Alaska. Several chapters are devoted to the relationship of wildlife to other resources and to sparse human population. We are told that fisheries, trapping, and hunting will comprise the most important resources in the next few decades, with tourism and its related industries, based on Alaska's scenic and natural history attractions, running second. The authors make the point that most of the land use and commercial resources — the fish, timber, and water power — are peripheral, centering on the southern panhandle, where the capital is located at Juneau, the vast

interior being totally unsuited for agriculture or industry. They emphasize that the popular accounts of farms in the warm interior valley of Pasture, Alaska, are exceptional and give a false view of the future possibilities of the peninsula. Their conclusion is the need for planning wildlife reservations in accordance with the following concept: "We believe that Alaska's scenery, remoteness, and wildlife can be her greatest continuing resource, in that tourism could well become one of the prime industries which will directly supplement her principal income now derived from the salmon industry." A concrete proposal is made for the establishment of an Arctic Wilderness Area in northeastern Alaska, a vital area in the future management of the Caribou and Musk Ox.

To the naturalist this book will be, as its subtitle indicates, an important regional ecological reconnaissance of the large horned mammals, the Caribou, Moose, Black-tailed Deer, Dall Sheep, and Mountain Goat, as well as of the introduced Reindeer, the Wapiti or Elk, Bison, and the once extirpated and now reintroduced Musk Ox brought from Greenland. The findings from studies by the authors and others form the basis for important conclusions and recommendations concerning the welfare of these ungulates. They deduce that the determinant factor in the abundance of these species is the quality of the grazing and browsing habitat in the winter season, not hunting nor predation.

More southerly mammals, such as the Black-tailed Deer and the Moose, are increasing since man, through lumbering and fires, has increased their favorite browse of willows, birch, and aspens. Fire, on the other hand, has destroyed the lichen pastures of the Caribou in central and southern Alaska, which will need fifty to one hundred years for re-establishment. The introduced Reindeer have had a crash in numbers because they consumed the local lichen supply after their first exceptional increase.

The authors, in their travels, were highly impressed with the concentrations of breeding waterfowl in the low tundra and lakes of eastern Alaska, the Black Brant, the Emperor, White-fronted, and Cackling Geese, the Sandhill Cranes, and numerous shore birds. On flights over the barrens at northernmost Point Barrow, they were surprised to find Snowy Owls concentrated mostly along the coast of the Arctic Ocean rather than generally distributed.

The book is attractive in design and format. Photographs and maps outlining species distribution aid in graphically illustrating the text.

ROBERT L. GRAYCE

Book Reviews (Cont.)

THE IMPROVED NUT TREES OF NORTH AMERICA AND HOW TO GROW THEM. By Clarence A. Reed and John Davidson. The Devin-Adair Company, New York. 1954. Illustrated by line drawings and half tones. xxv, 404 pages. \$6.00.

The authors say, "It is our chief aim to interest people in the rewards to be found in breeding, planting, propagating, and making a living out of nut trees and to help them to do these things successfully. No book can pretend to do more than start the reader on his way." This they have done most successfully.

There are probably few persons who will read this book from cover to cover as they would a novel of romance or adventure, and yet there are included in it many stories as exciting as are the novels. For example, there is the story of the practically total loss of our native American chestnut and the search over vast areas of the world for another chestnut to replace it, and the research involved in breeding and developing a blight-resistant tree which bears good nuts and grows into a good timber tree. Or, again, witness the search of the world for a Persian or English walnut hardy enough to grow and produce good nuts in our climate, or the work in progress in hybridizing new varieties of superior merit or suited for particular climates.

The book treats of *edible* nuts. In this part of the world we are less affected by the problem of supplying adequate food for the rapidly growing population which is so pressing in many parts of the world, yet nuts can play an important role in our food production. The nutritive value of nuts is well known, and they can be grown in locations not available for other food production. As J. Russell Smith says in his introduction, "If only a fraction of the number of trees that are now planted for shade and ornament alone could be replaced with suitable nut-bearing species, the food supply of the country would be appreciably increased."

There are many books and articles on different aspects of growing nut trees, but here is a basic treatise on all phases of nut trees. Anyone can find in it what he wants to know on any part of the subject. The different species are treated in separate parts — walnuts, hickories, chestnuts, filberts, beeches, oaks, and others; and as to each its climate and soil requirements, care and culture, what varieties are best, what are the possibilities of commercial success, and what progress is being

made in improvement in varieties. The grower of one backyard tree or the commercial operator on a large scale will each find the information he needs. There are additional chapters on propagation and culture, grafting, soils and fertilizers, and insects and diseases. And for those who wish to delve further, there are references for more detailed reading.

S. H. WELLMAN

SEA-BIRDS. An Introduction to the Natural History of the Sea-Birds of the North Atlantic. By James Fisher and R. M. Lockley. Houghton Mifflin Company, Boston. 1954. 320 pages. \$6.00.

Probably no two collaborating authors could be found better qualified to discuss the sea-birds of the North Atlantic than James Fisher, author of *The Fulmar* and other recognized books on ornithology, and R. M. Lockley, author of *Shearwaters and Puffins*. Not only has one or both of these men canvassed thoroughly the British Isles, where most of these birds are represented, but their explorations have taken them from Spitsbergen and Iceland to Madeira and the Salvages. For these life history studies, they have drawn both on their own field work and the extensive literature available.

Chapter One covers the North Atlantic Ocean, its structure and the sea-birds found on it. Tables, figures, and maps show graphically the distribution of the 116 breeding sea-birds and are of considerable reference value, as are also four pages of comment devoted to non-breeders and casual wanderers likely to be met in this region.

Evolutionary changes, the effect of man and other factors on control of numbers of sea-birds, navigation, and social and sexual behavior are covered in following chapters. Finally, there are discussions of the different groups of birds, from the Tube-noses and Pelicans through Skuas, Gulls, Terns, and Skimmers to the Auks. An appendix lists the Sea-birds of the North Atlantic with their distribution, and there is also an extensive bibliography.

Many little-known facts are brought together in this most readable volume, but the scientist and the casual observer are encouraged to fill in the many gaps that exist in our knowledge of these interesting birds that ply the seas during much of their lives. For example, only a sketchy account can be given of the rare and beautiful Sabine's Gull, discovered in 1818, which, as a vagrant, is occasionally recorded along the Massachusetts coast. "What happens to the Atlantic population of Sabine's Gull between November and May?" the authors ask.

Book Reviews (Cont.)

Here is a book that should receive a warm welcome from all ornithologists and bird-watchers who follow the birds of the seas.

C. RUSSELL MASON

WEEDS: GUARDIANS OF THE SOIL. By Joseph A. Cocannouer. The Devin-Adair Company, New York. 1950. 179 pages. 22 illustrations. \$2.75.

The last two sentences in this book pretty well summarize why it was written: "Blind antipathy toward weeds will get us nowhere. But a sane study of the weed as a part of the law involved in the maintenance of soil fertility can be revealing to any open-minded person." This is a statement of moderation, and one with much truth in it. But the entire book cannot so easily be encompassed in a neat phrase. For one thing, it seems to this reviewer there is much reiteration of the author's belief that weeds are helpful in bringing minerals from subsoils to topsoils, where they become available to crop plants. Also, while a person might agree that some weeds among crop plants may have considerable value as "mother plants," there seems little advice in the book as how to achieve the necessary balance between weeds and crop plants so that the weeds would not bury the crop plants.

Persons interested in wildlife and conservation will be interested in the chapters on "Weeds and Wildlife" and the final chapter, "Nature's Togetherness Law." The author admits he has not scrutinized all books written on wildlife preservation, which is understandable because of their abundance. However, a perusal of the best-known reference in this field, *Game Management*, by Aldo Leopold, would have shown that weeds have been considered as wildlife foods and as producers of wildlife cover.

All in all, this interestingly written "first book . . . in praise of weeds" by Professor Cocannouer is a stimulant to thinking about the place of weeds in gardening, farming, and wildlife management. But, without a doubt, the value of weeds will be debated for a long time to come.

EDWIN A. MASON

THE LIMITS OF THE EARTH. By Fairfield Osborn. Little, Brown and Company, Boston. 1953. 238 pages. \$3.50.

Here is another volume discussing the crisis of the ever-increasing population of the world in relation to its actual and potential supply of food and other essential resources. Some of these volumes are de-

pressing to the point that one feels the situation facing us today and in the foreseeable future is incapable of solution and that there is no escape from the dilemma in which we find ourselves, a dilemma of our own making, which, according to the author, is the world's refusal to control its own excessive population. On the other hand are volumes that make it seem there is no problem whatsoever — the magic of "technology" is to be the open-sesame to all problems and there is nothing about which to be apprehensive. In the present work we find a report that confines itself, as much as any work in such a field can confine itself, to the realities of the problem, to a frank analysis of it, and to its possible solutions. Here we have a penetrating analysis of *the limits of the earth* by the president of the New York Zoological Society and of the Conservation Foundation. The various regions of the world are discussed as to their possible help in overcoming excessive population and inadequate food resources in other parts of the globe. The chapter headings are provocative in the extreme, such as "GREAT BRITAIN AND EUROPE: The twilight of empire . . . Where shall our people go?"; "AUSTRALIA, CANADA AND ARGENTINA: Food-surplus countries — delusions and realities"; "THE AMAZON: Is its vastness designed for man?"

Keenly analytical, written in a popular style, replete with challenging and thought-provoking statements, this book should be read by all those interested in the world and its problems.

HARRY LEVI

A THOUSAND GEESE. By Peter Scott and James Fisher. Houghton Mifflin Company, Boston. 1954. 240 pages. \$4.00.

The authors are two of the best-known British ornithologists. They and Philippa Talbot-Ponsonby, an Englishwoman who later became Mrs. Peter Scott, and Finnur Guomundsson, Director of the National Museum of Iceland, joined in an expedition to an oasis in the central desert of Iceland in an attempt to find the main breeding grounds of the Pink-footed Goose. Although this species winters in great numbers in the British Isles, little has been known of its summer habits, since the first nest was found less than a century ago, and the bird was found breeding in the interior of Iceland less than two decades ago. *A Thousand Geese* is a well-written account of this expedition.

It was a difficult undertaking, requiring enthusiasm, fortitude, and ingenuity, as well as the co-operation of competent Icelandic guides and interested farmers.

Book Reviews (Cont.)

Plans were not only to observe the geese but also to band as many as possible, both adults in the flightless stage and goslings, in the hope that later recoveries in the British Isles would tend to throw more light on the travels and habits of the species. At the beginning of the expedition it was estimated that if five hundred birds could be banded the trip would be a "roaring success." Actually 1151 birds were banded — or ringed, as the English call it — and already there have been close to two hundred recoveries. Many methods of rounding up and catching the geese were tried, but those finally successful were based on ancient methods of the Icelanders to herd these birds into goosefolds.

The material in the book was taken largely from carefully kept diaries of the explorers and covers, not only the Pink-footed Goose and other geese found, but many other interesting birds studied, such as Parasitic Jaeger, Golden Plover, Arctic Tern, and Whooper Swan. An account is given, also, of the most interesting flowering plants found in the region.

The reading of this entertaining yet scientific account gives one the feeling that he would like to have an opportunity to follow a similar trail.

C. RUSSELL MASON

THE FLOWERING CACTUS: An Informative Guide. Edited by Raymond Carlson. Photography and Technical Data by R. C. and Claire Proctor. Sketches by George M. Avey. McGraw-Hill Book Co., Inc., New York. 1954. \$7.50.

"Spectacular" is the word! The color plates in this book comprise the most gorgeous collection of flower photographs it has been my good fortune to see anywhere. Eighty-one of the 115 photographs are in natural color, twenty-six of them being the full size of the 8½-by-11-inch pages. The choice of subjects, the photography, and the reproduction all call for superlatives in description. To see this book is to covet it.

We are all familiar with the drooping blooms of the Christmas, or Lobster-claw, Cactus, some of us have seen the yellow Prickly Pear blossoms when birding at Cape May or at Woods Hole in Massachusetts (the most northerly habitat of this hot-weather family), others of us have thrilled at the transitory beauty of the Night-blooming Cereus, but until we visit our desert country of the Southwest at the blossoming season of these strange plants

we may not know their great beauty and astonishing variety.

It is difficult to choose favorite portraits in such a galaxy of beauty — whether the pearly textured whites of nocturnal species, like the Midnight Lady, the Easter Lily Cactus, or the Arizona Queen of the Night, the delicate pinks of the Arizona Rainbow, the Empress, or the Supreme Orchid Cactus, the clear yellows of some of the Prickly Pears, or the varied reds and near purples of many others. The Proctors have spent fifteen years and covered thousands of miles of travel in procuring this collection of cactus portraits, and in this volume are presented the most outstanding color photographs from their great store of material. The excellent commentary is by Raymond Carlson, editor of *Arizona Highways*, where several of these studies first appeared in print. Interesting drawings of details of growth and structure are included, adding value to the text.

The book concludes with an informative chapter on the cultivation of cacti, another dealing clearly with the camera methods used by the Proctors, and finally a "Guide to the Flowering Cactus" which gives the growing range and flowering season of more than 150 cacti and a few other plants, such as the Yuccas, Palo Verde, and Ocotillo.

JOHN B. MAY

AMERICAN GAME BIRDS OF FIELD AND FOREST: Their Habits, Ecology and Management. By Frank C. Edminster. Illustrated with Photographs, Charts and Maps. Charles Scribners Sons, New York, 1954. 490 pages. \$12.50.

The full title describes this book concisely. Frank C. Edminster is a recognized authority on the upland game of North America, and this volume includes the results of his exhaustive researches into the history, habits, management, and future prospects of seventeen species of upland game birds (three of these are introduced aliens). It is a book for the sportsman, the conservationist, the landowner, and the wildlife technician, rather than for the general reader or the amateur bird student or "bird watcher."

Several of the birds treated in this work have diminished greatly in numbers under hunting pressure (the Passenger Pigeon and the Heath Hen are omitted as already exterminated by ruthless man), others are holding their own today but in greatly restricted areas as compared with their original ranges, and a few (notably the alien species) are increasing under modern "game management" procedures.

Book Reviews (Cont.)

Each of the seventeen species (thirteen members of the gallinaceous family, three of the pigeons and doves, and one shore bird) is treated separately and at great length (the Ring-necked Pheasant, Bob-white Quail, and Wild Turkey each have more than fifty-five pages) under the headings of Origin and Classification, History, Geographic Range in America, Description, Importance as a Game Bird, Habits, Shelter Requirements, Food Habits, Effects of Weather and Climate, Predation, Man's Relation to the Species, Reproduction and Populations, Management. Together they form a most valuable contribution to our conservation literature.

JOHN B. MAY

BIRD SONGS OF DOORYARD, FIELD AND FOREST, VOL. II. Twelve-inch long-playing vinylite record. Recorded by Norma and Jerry Stillwell. Ficker Recording. \$7.95.

Bird lovers and students who have enjoyed and benefitted from the first Stillwell record, as well as many new listeners, will find in this disc the general high quality and painstaking devotion to the task that distinguished the earlier work. The Stillwells spent four months travelling over the East recording 140 songs and calls of 58 species, and more months at home editing "miles of tape." The result of this dedication is a record of considerable and sustained interest.

One of its finest features is the arrangement of bird songs so that comparison of similar species is possible; robins, tanagers, rose-breasted grosbeaks, and orioles sing side by side, as it were; the different vireos may be studied; the chickadee calls contrasted. In some instances the songs of the winter wren and the thrushes have been reduced to half speed and the pitch of an octave lower. The virtue here is that the incredible number of individual notes may be realized, and the pyrotechnics marvelled at. One must be thankful however, that the birds themselves cannot indulge in this practice.

In the backgrounds of the separate songs, other birds singing provide added realism and delight. We have the feeling of participation, of being with the Stillwells in field and forest; we are always well aware that this is not the product of laboratory or museum.

The quality of the recording itself is excellent, the reproduction clear, with close

microphone pick-up. The band containing the thrushes is particularly impressive. The commentary by the Stillwells is apt and brief.

MARJORY BARTLETT SANGER

SONGBIRDS OF AMERICA. IN COLOR, SOUND, AND STORY. In One Volume. By Dr. Arthur A. Allen and Dr. Peter P. Kellogg. Laboratory of Ornithology, Cornell University. May, 1954. \$4.95.

For several years we have looked forward to the issuing of some of the Cornell recordings on a long-playing record, and we are delighted to welcome this first color, sound, and story combination of bird songs.

In addition to the record of songs of twenty-four more common birds, you secure twenty-four color plates of these birds in action, photographs taken by Dr. Allen and reproduced originally in the *National Geographic Magazine*. And you also receive a text which discusses the place of birds in nature, their migrations, usefulness, color, habits, and music, and a commentary on each of the twenty-four species of birds as to range, size, habits, songs, and a memory phrase to help one recall the song. This text covers twenty-eight pages of the volume and will help to make the material of real value for any library. Some of our most interesting birds are included, arranged in order as you might meet them on a field trip, such as Bluebird, Brown Thrasher, Rose-breasted Grosbeak, Mockingbird, Meadowlark, Wood Thrush, Baltimore Oriole, and Cardinal.

We know of no better way to learn bird songs than to play a recording like this Cornell production and then listen to the birds as you encounter them in the field.

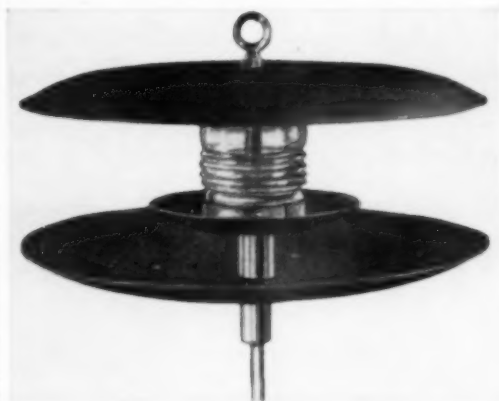
C. RUSSELL MASON

A Schoolgirl Writes Us

Thank you very much for your encouraging letter regarding my participation in the New England Science Contest. You also said that I might submit my poem on a Wood Duck to one of the Boston newspapers. . . I sent it to Naomi Harrington, editor of the "Top of the Morning" of the *Boston Herald*. I was very happy to find the poem printed in this column in the July 24 issue.

I have greatly appreciated Mr. Robert Grayce's and your interest in my Fox and Song Sparrow project. I have loved the work of the Society and have followed it closely in *The Bulletin*. When you find inspiration in nature, you find inspiration from the Massachusetts Audubon Society.

Constance Chapman Belden
Wellesley Hills, Mass.

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An Introduction to Bird Watching

"An Introduction to Bird Watching," will be given at Audubon House starting January 11. The morning course will include indoor meetings and field trips, the dates of the trips to be adjusted to weather and early migration patterns. The evening course will consist of eight meetings and two Saturday field trips.

These courses are designed for the beginner's introduction to the enjoyment of birds at the feeders and in the field. About seventy-five common Massachusetts birds will be considered. Through the use of slides, records, mounted specimens, and field trips, the techniques of knowing birds will be explained. The instructor will be Miss Frances Sherburne. Fee for either course, \$8.50 (field trip transportation extra).

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We offer the best and latest books on Nature Lore, Natural Science, and Conservation, and Field Guides to all branches of Natural History, including all books reviewed in the *Bulletin*.

Members of the Massachusetts Audubon Society are entitled to a discount of ten per cent on most books (no discount if marked *).

Walk Quietly	\$ 3.00	Birds of the Ocean	7.50
Frances S. Parker		W. B. Alexander	
The Giant Cactus Forest		A handbook of all the sea birds	
And Its World	7.50	of the world.	
Paul Griswold Howes		Guide to Bird Finding East	
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Emmet Reid Blake		Over 1000 illustrations	
A guide to field identification.		*Margins of the Sea	3.00
Field Guide of Birds of		Maurice Burton	
the West Indies	4.00	Wonders of evolution as seen in	
James Bond		life between high and low tide-	
		marks of the sea.	

Exhibition of New Peterson Paintings

Through the courtesy of John Morrell and Company, owner of twelve new bird paintings by Roger Tory Peterson, these paintings will be on display at Childs Gallery, 169 Newbury Street, Boston, for two weeks, beginning January 24. We hope members and friends who miss seeing these paintings at our Annual Meeting in Hayden Hall, Boston University, on January 22, will have opportunity to visit the Childs Gallery while the paintings are in Boston.

Brookline Bird Club Trips
Open to Members of the Massachusetts Audubon Society

January 8, all day. Ipswich and vicinity. Mr. Lewis, CRystal 9-1355-R. Afternoon, Devereux and Marblehead Neck. Miss Jewell, LYnn 2-0371.

January 15, all day. Auto trip to Boxford and Essex County. Mr. Jameson, Beverly 1720-J.

January 22, 9:30 A.M. Boston Fenway. Miss Hanson, COMmonwealth 6-1595.

January 29, all day. Newburyport and vicinity. Miss Barry, MElrose 4-5888. Afternoon, Nahant. Mrs. Boot, LYnn 8-0257.

February 5, all day. Rockport and Cape Ann. Mr. Little, WALtham 5-4295-J.

February 6, afternoon. Devereux and Marblehead Neck, Miss Fowler, KENmore 6-5842.

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Book Reviews (Cont.)

LIFE HISTORIES OF NORTH AMERICAN WOOD WARBLERS. By Arthur Cleveland Bent. Smithsonian Institution, U.S. National Museum Bulletin 203, U.S. Government Printing Office, 1953. 734 pages. \$4.50.

This 19th of the series of *Life Histories of North American Birds* has received the usual warm welcome by ornithologists who look forward to these publications. Official notice of it has been long delayed because of the illness and decease of Winsor M. Tyler, who had agreed to review it for the *Bulletin*. The life histories of all wood warblers of North America, from the Black and White to the Northern Painted Redstart, are well covered, the material being a compilation of reports from many co-operators, much of it written by Mr. Bent. Dr. Tyler read and indexed the material for this volume, contributed four of the life histories, and also looked through a large part of the current literature on the warblers. Other writers included are Dr. Alfred O. Gross, Edward von S. Dingle, Alexander Sprunt, Jr., and Dr. Josselyn VanTyne. William G. F. Harris furnished the data on eggs. Under each species are general comments and information from many sources on courtship, nesting, eggs, young, plumages, food, behavior, voice, field marks, enemies, winter status, and distribution. There are eighty-three pages of photographs.

C. RUSSELL MASON

THE BOOK OF WILD PETS. By Clifford B. Moore. Charles T. Brandford Company, Boston, 1954. (Published by special arrangement with G. P. Putnam's Sons, publisher of 1937 edition.) \$5.95.

The new edition of Clifford Moore's *The Book of Wild Pets* is an informational milestone for everyone interested in wild animals, and it is a boon to harassed individuals, such as sanctuary directors, museum personnel, and those attending the information desk at Audubon House. At such sensitive spots, practical answers to questions about how to feed and care for wild animals, how to give first aid to injured creatures, what kind of cage to provide, and many other searching queries make Mr. Moore's book an antidote to the complicated problems of caring for wildlife in captivity.

I was first introduced to this excellent text when I served as director of a children's museum in a city where this organization was the only natural history center. The museum was an animal hospital and the source of information on everything wild. One learns fast by doing, but *The Book of Wild Pets* was the indispensable short cut to knowledge about caring for pets, and I am sure the silent rescuer of many animal lives.

Mr. Moore's information is presented in a readable, well-organized form, avoiding a technical and weighty vocabulary, useless generalizations, and sentimentality about animal pets. He has aimed toward compiling a handy reference and source book on the care and feeding of our most common native, and in some cases "naturalized," wildlife forms in captivity, and has made a remarkable success in reaching his objectives. His material is based on countless experiments and experiences, which explains why his book so meets the exacting requirements of those who must meet the responsibilities of caring for animals in captivity from day to day.

Mr. Moore is also very thorough in his coverage of topics. The first chapters on a balanced fresh-water aquarium are written in careful detail, are well illustrated, and answer numbers of questions which arise for everyone trying to maintain an aquarium. He treats equally well the subject of water insects in aquariums, the maintenance of a marine aquarium, and the diseases of fish.

His treatment of terrariums and their small animal inhabitants deals with woodland habitats, semiaquatic set-ups, and even a desert. His chapters on native birds, aquatic game birds, and wild animals all discuss the various species as to diet, cage requirements, habits, and disease and treatment. Ample illustrations make visualization of the cage requirements simple. Also there is an excellent chapter on attracting birds, with specific directions on construction devices to prevent squirrels and discourage cats, and for building feeders and houses.

We can be grateful for the kind of information which Mr. Moore provides, but perhaps even more so for its completeness. He gives advice on every animal which is likely to be kept in captivity at home, school, camp, or small museum, not even omitting the insects and spiders.

It is unfortunate that this excellent book was out of print for several years, but, now that it has been reprinted, every naturalist should consider it a must for his library.

MARY LELA GRIMES

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Bird Cafes, 16-inch	5.95
25-inch	6.95
Squirrel Proof Feeder, 25-inch	12.00

Outdoor Revolving Feeders

Cape Cod Inn, painted white	15.95
stained brown	11.95

Metal Squirrel Foil 3.95

Chickadee Tidbits (box of 24) 1.25

Suet Cakes — square, 30c; oblong, 35c;
wedge, 45c.

New Trolley Feeder 7.50
Holds five pounds.

10% discount to members,
on all Bird Restaurants.

STATIONERY

10 Hand-painted Chickadee Notes	\$1.50
10 Water Birds from originals by Leif Rydeng	1.50
12 Massachusetts Bird and Flower Notes60
16 Bird Notes	1.00
20 Hasty-Notes — Birds and Flowers	1.00

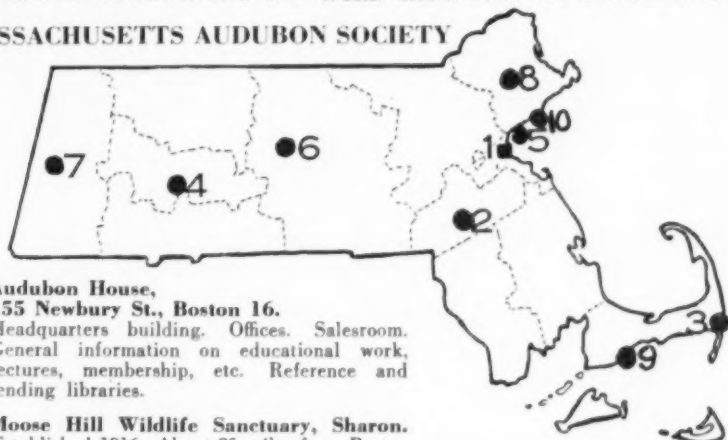
No discount

FOX WIRE, cut to fit across or all around any bird feeder. Size at open-

ing 1½ in. x 1½ in. Square foot 25 cents. Minimum charge, 50 cents.

No discount

AUDUBON HOUSE and the WILD LIFE SANCTUARIES of the MASSACHUSETTS AUDUBON SOCIETY



1. **Audubon House, 155 Newbury St., Boston 16.**
Headquarters building. Offices. Salesroom. General information on educational work, lectures, membership, etc. Reference and lending libraries.
2. **Moose Hill Wildlife Sanctuary, Sharon.**
Established 1916. About 25 miles from Boston near Providence Pike. 250 acres mixed woodland. Small pond. Museum. Nature Trails. Albert W. Bussewitz, Resident Director.
3. **Tern Island Wildlife Sanctuary, Chatham.**
Established 1936. 10 acres sand and beach grass. Large colony of nesting terns. Management, O. L. Austin Ornithological Research Station, North Eastham.
4. **Arcadia Wildlife Sanctuary, Northampton.**
Established 1944. 300 acres meadow, marsh, and woodland. Nature Trails. Memorial and experimental plantings. Studio workshop. Edwin A. Mason, Resident Director.
5. **Nahant Thicket Wildlife Sanctuary, Nahant.**
Established 1948. 4 acres. On Atlantic Flyway. Hordes of migrating land birds in spring and fall. Trails.
6. **Cook's Canyon Wildlife Sanctuary, Barre.**
Established 1948. 35 acres. Coniferous plantation. Small pond. Rocky gorge. Interesting trails. Site of Natural Science Workshop for leaders and resident and day camps for boys and girls. David R. Miner, Resident Director.
7. **Pleasant Valley Wildlife Sanctuary, Lenox.**
A "Bird and Wild Flower" Sanctuary since 1929. A square mile of typical Berkshire woodland and stream valley. Nature Trails. Trailside Museum. Beaver pond. Barn Restaurant in summer. Alvah W. Sanborn, Resident Director.
8. **Ipswich River Wildlife Sanctuary, Topsfield, Wenham and Hamilton.**
Established 1951. 2000 acres. On Ipswich River. Extensive marshland with islands. Great variety introduced trees and shrubs. Elmer P. Foye, Resident Director.
9. **Sampson's Island Wildlife Sanctuary, Cotuit.**
Established 1953. 16 acres sand and beach grass, nesting place of terns.
10. **Marblehead Neck Wildlife Sanctuary, Marblehead.**
Established 1953. About 15 acres mixed hardwoods and maple-alder swamp, especially interesting during migrations.

Further information about any of the above sanctuaries may be obtained from Massachusetts Audubon Society, 155 Newbury St., Boston 16; Phone KENmore 6-4895.

"CONSERVATION IN ACTION"

THE AUDUBON EDUCATION PROGRAM

Is Supported Largely

By Your Current Dues and Donations

450 Weekly or Biweekly Classes in Conservation and Natural Science in the Schools of Massachusetts and Rhode Island, taught by our staff of twenty-three trained and experienced teachers reaching 16,000 boys and girls during the school year.

Demonstration Natural History Camps for Children at five of the nine Audubon Sanctuaries in Massachusetts.

Conservation and Natural Science Workshops for Camp Counselors, Teachers, and other Youth Group Leaders.

200 Lectures annually by members of the Audubon Staff to Garden Clubs, Women's Clubs, Parent-Teacher Associations, School Biology Classes, and other groups.

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Circulars relating to Bird and Mammal Conservation distributed regularly to Youth Group Leaders throughout the Commonwealth.

Audubon Visual Aids furnished at small cost to Teachers and Lecturers.

The BULLETIN OF THE MASSACHUSETTS AUDUBON SOCIETY, an outstanding magazine in its field, published nine times a year. RECORDS OF NEW ENGLAND BIRDS, monthly.

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Lending and Reference Libraries available to members.

***WE APPRECIATE YOUR CO-OPERATION IN
CARRYING ON THIS MOST IMPORTANT WORK OF
THE SOCIETY.***

Will you consider the desirability of making the Massachusetts Audubon Society a legatee under your will, or make such recommendation to your friends?